

Bathroom Plumbing Repairs for Ledyard High School

24 Gallup Hill Road
Ledyard, CT 06339



LIST OF DRAWINGS

GENERAL INFORMATION & CODE DRAWINGS

A000 - COVER SHEET

ARCHITECTURAL DRAWINGS

A001 CODE SHEET
A100 TOILET DRAWINGS
A101 TOILET DRAWINGS

PLUMBING DRAWINGS

P100 PLUMBING PLANS, LEGENDS AND ABBREVIATIONS
P200 PLUMBING SCHEDULES, NOTES AND DETAILS

MECHANICAL DRAWINGS

M100 MECHANICAL PLANS, NOTES, LEGENDS AND DETAILS

ELECTRICAL DRAWINGS

E1 LIGHTING PLAN
E2 POWER PLAN
E3 DETAILS



SILVER / PETRUCELLI + ASSOCIATES

Architects / Engineers / Interior Designers

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March 24, 2016

PHASE 1:
CODE INFORMATION - BUILDING NO. 1

DATE OF ORIGINAL CONSTRUCTION	NA
DATE OF ALTERATION	2016

1. GROUP CLASSIFICATION (Chapter 3)	E-EDUCATIONAL
(Primary)	
(Incidental)	A-ASSEMBLY

2. CONSTRUCTION TYPE (Chapter 6)	2B
Minimum Type Required	
Actual Type Provided (existing)	2B

3. OCCUPANCY LOAD	
Design Total for 1st Floor (A)	2945
Design Total for 1st Floor (E)	2206
Design Total for 2nd Fl. (A)	139
Design Total for 2nd Fl. (E)	1372

4. MINIMUM PLUMBING FIXTURE COUNT (I.P.C. Chapter 4)
For each type of occupancy per entire facility

Group "A3" occupancy – Building 2: (Design Load = 3,084)

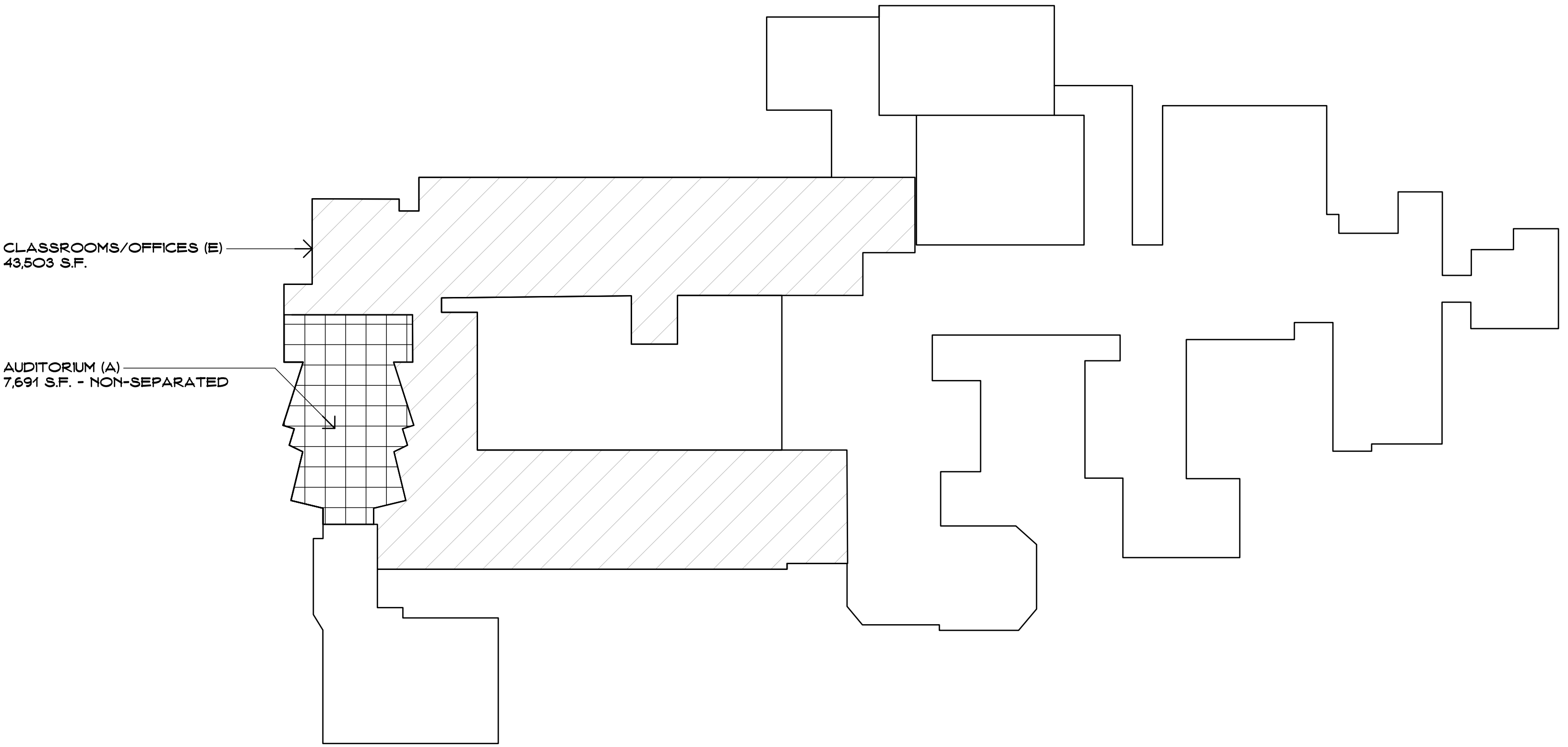
	Required	Provided
W/C Male	13	-
W/C Female	24	-
Lavs	16	-
D/F	4	-
W/C Unisex	-	-
Lavs Unisex	-	-

Group "E" occupancy – (Design Load = 3,578)

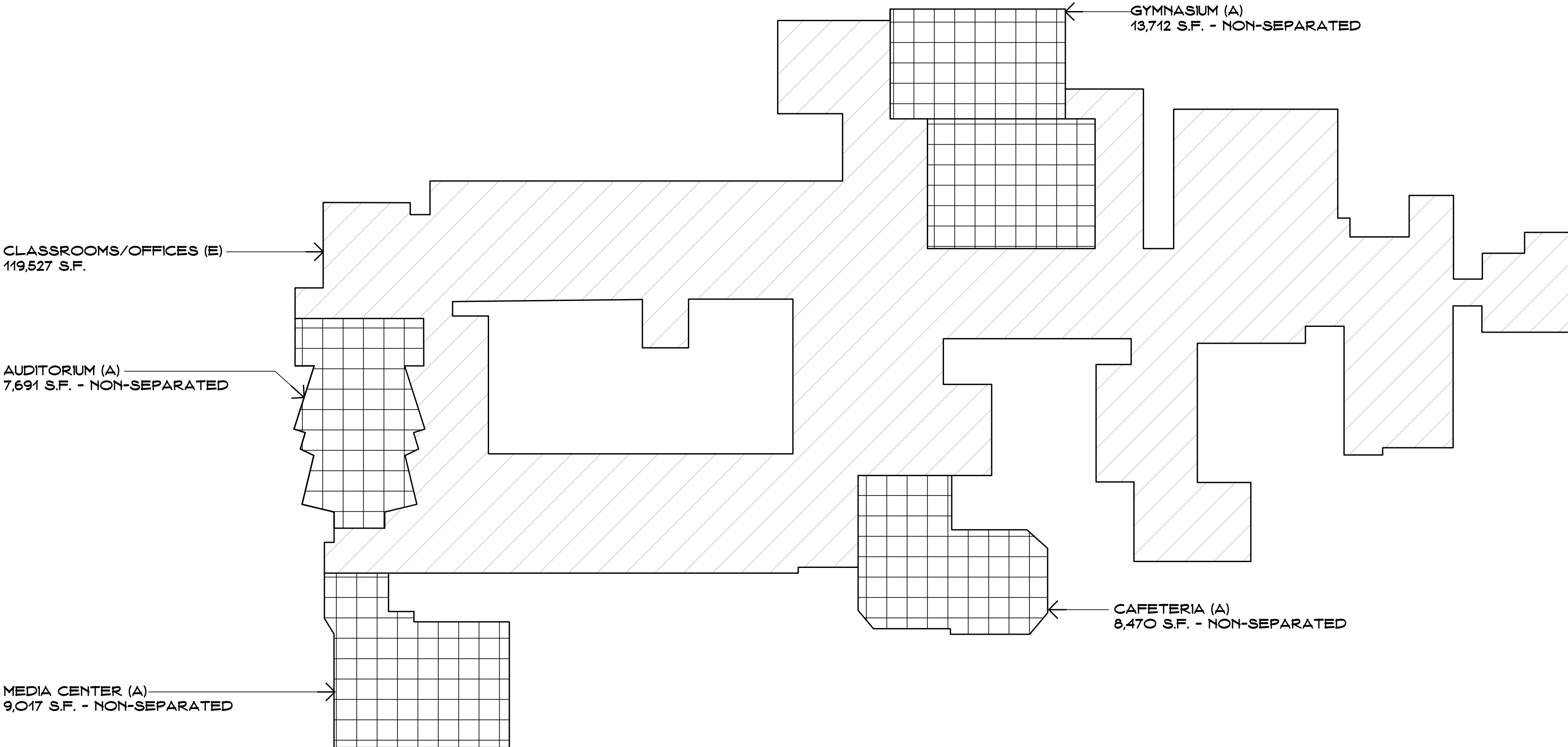
W/C	72	110
Lavs	72	66
D/F	36	110

(Total Design Load for entire facility = 3,578 persons)
Note: Non-simultaneous use of A3 and E

5. ENTIRE BUILDINGS SPRINKLERED	Yes	No
		X



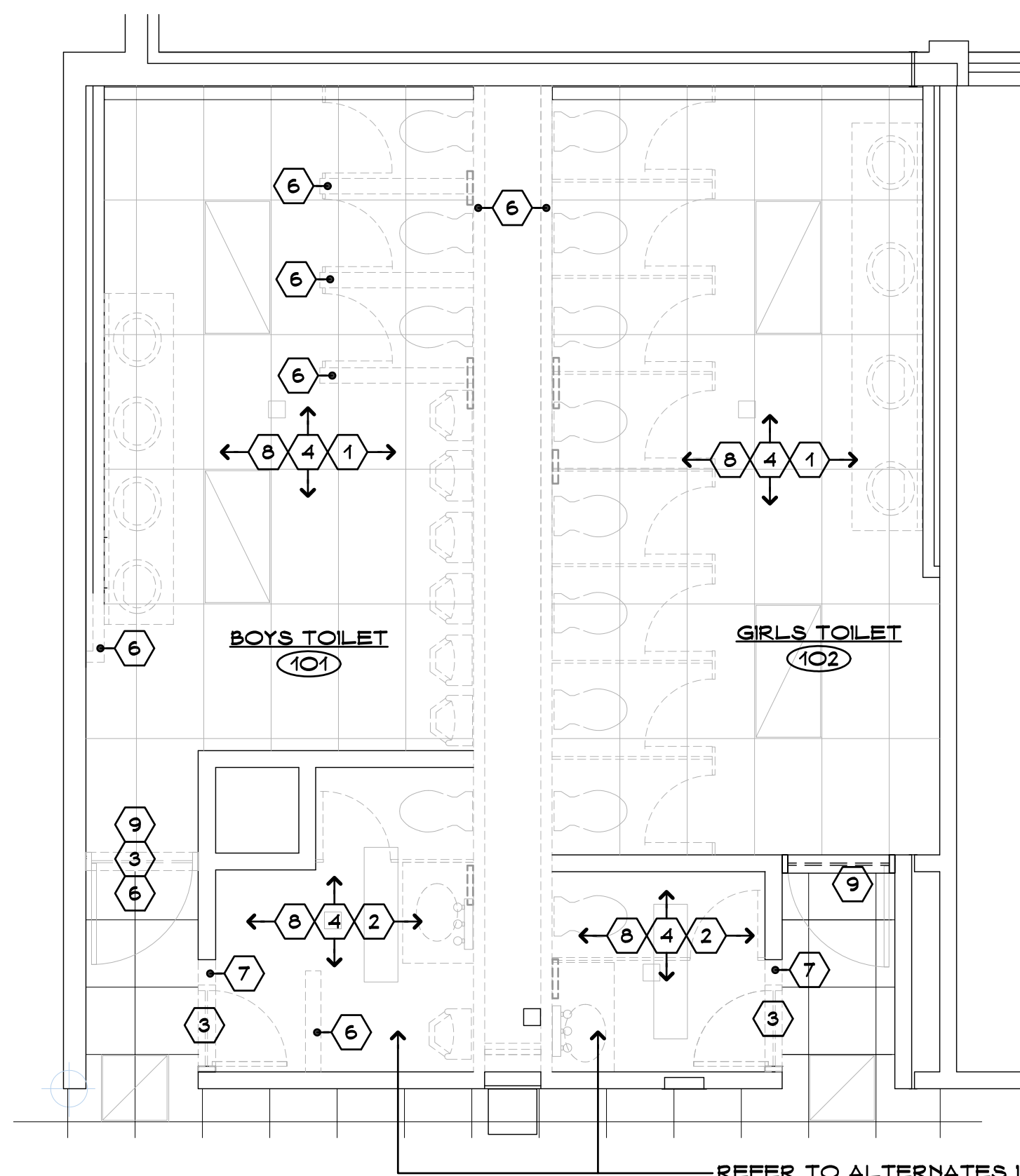
KEY PLAN - 2ND FLOOR



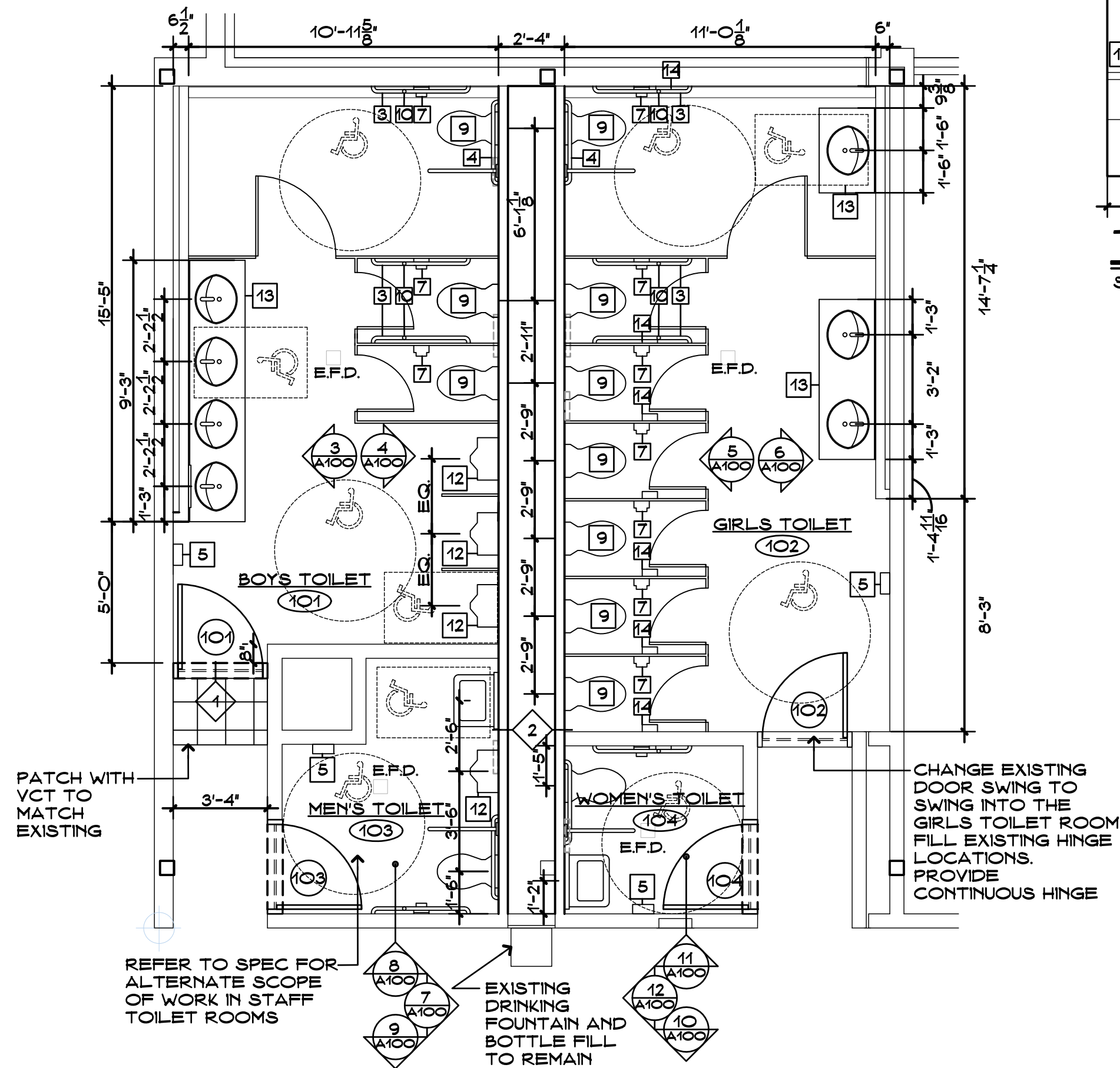
KEY PLAN - 1ST FLOOR



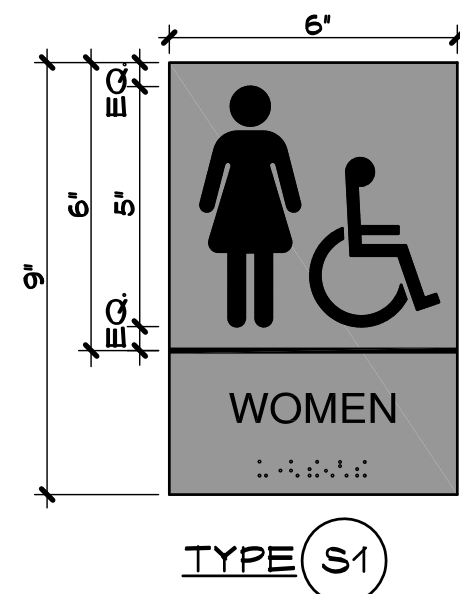
Revision	Description	Date	Revised By



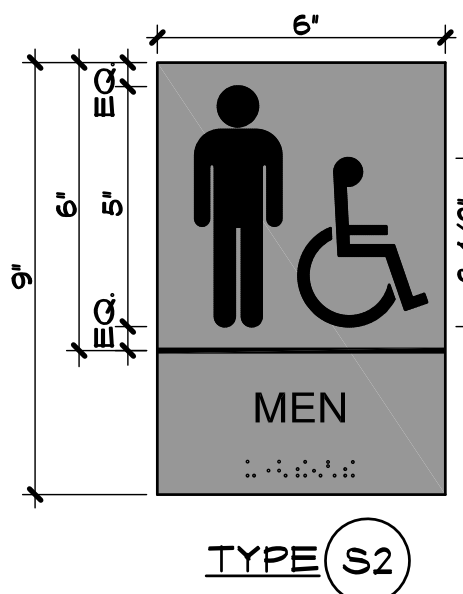
TOILET DEMO PLAN
SCALE: 1/4" = 1'-0"



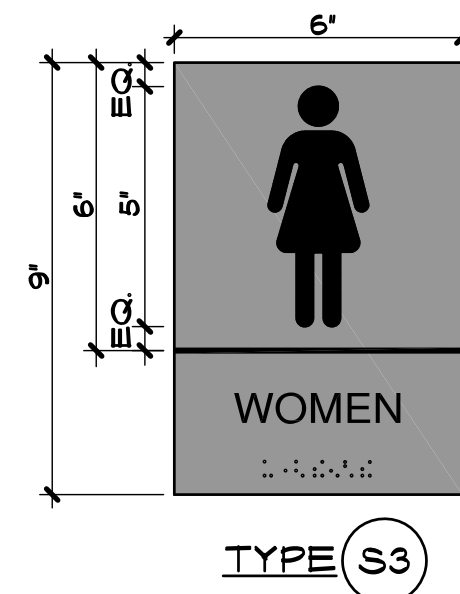
ENLARGED TOILET PLAN
SCALE: 1/4" = 1'-0"



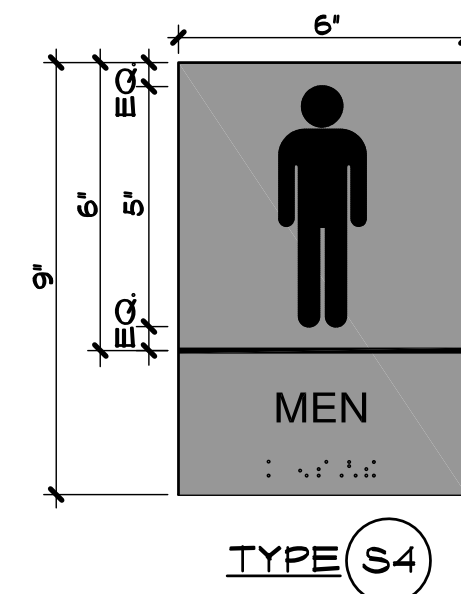
TYPE (S1)



TYPE (S2)



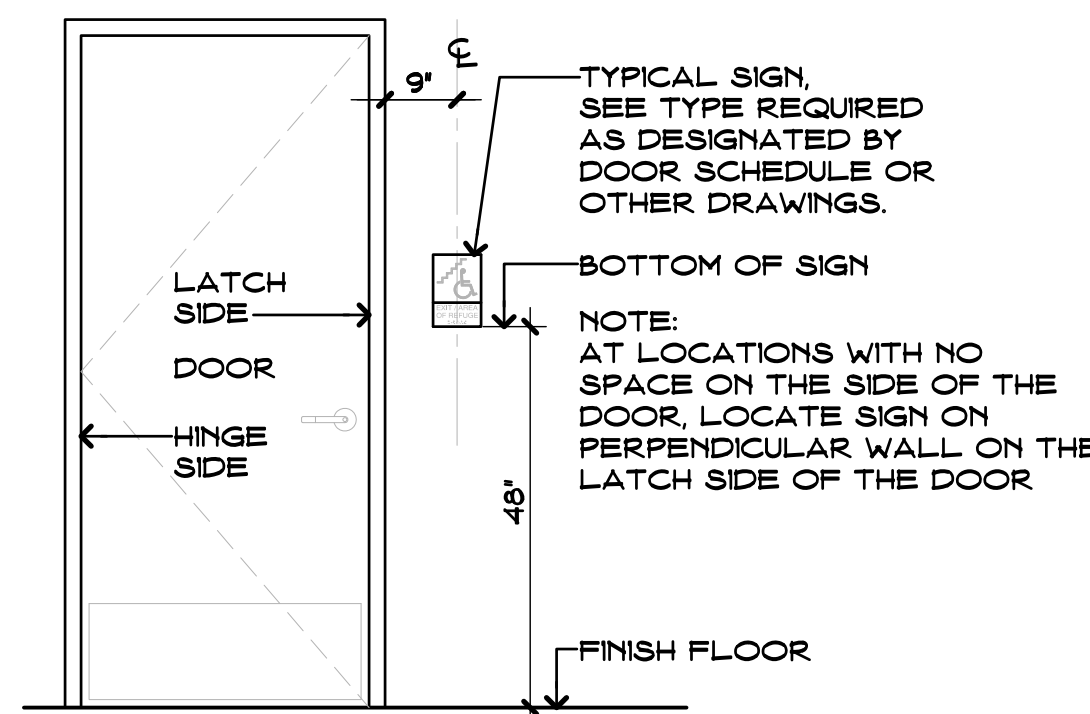
TYPE (S3)



TYPE (S4)

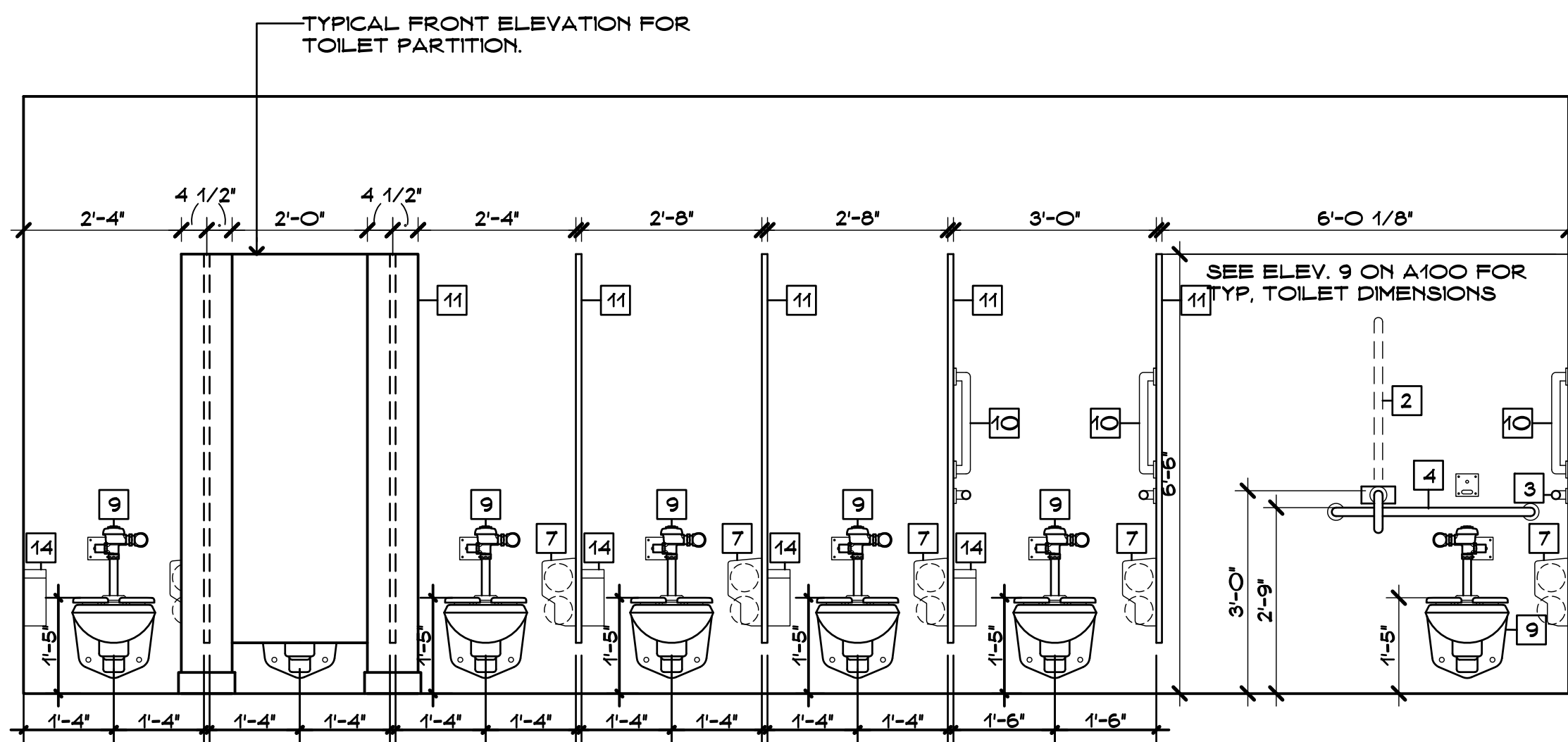
SIGNAGE TYPE DETAILS
SCALE: 3" = 1'-0"

- NOTES:
1. SIGNS SHALL COMPLY WITH CURRENT BUILDING CODE, ANSI STANDARDS, ADA REGULATIONS & GUIDELINES, AND ALL OTHER APPLICABLE REGULATIONS.
 2. TEXT ON SIGNS SHALL BE COORDINATED IN FIELD TO REFLECT ROOM USE AND SHALL BE APPROVED BY ARCHITECT AND OWNER PRIOR TO FABRICATION.
 3. SEE ALSO TYPICAL SIGN DETAIL AND TYPICAL SIGN MOUNTING DETAILS ON THIS DRAWING.

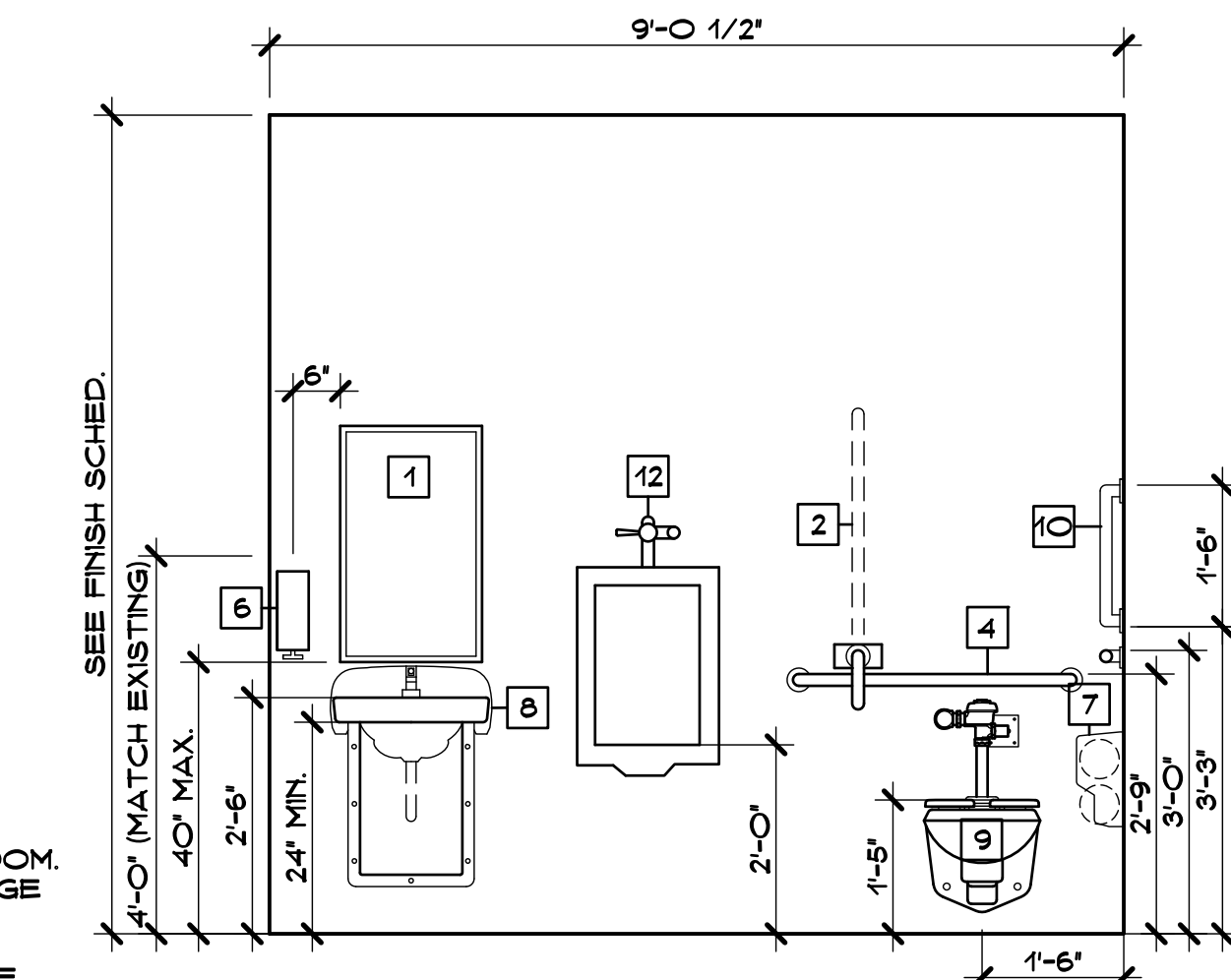


TYPICAL SIGNS MOUNTING DETAILS
SCALE: 1/2" = 1'-0"

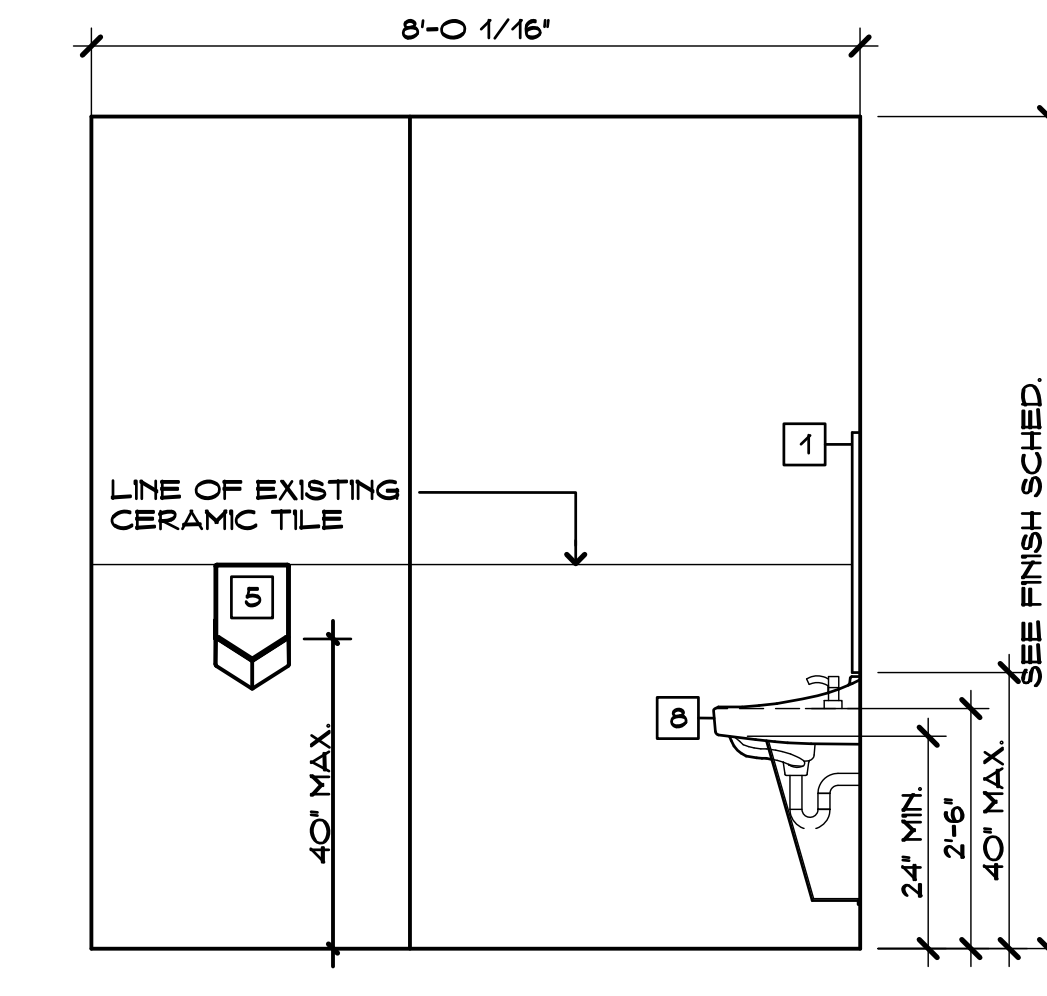
TOILET ELEVATION
SCALE: 1/2" = 1'-0"



TOILET ELEVATION
SCALE: 1/2" = 1'-0"

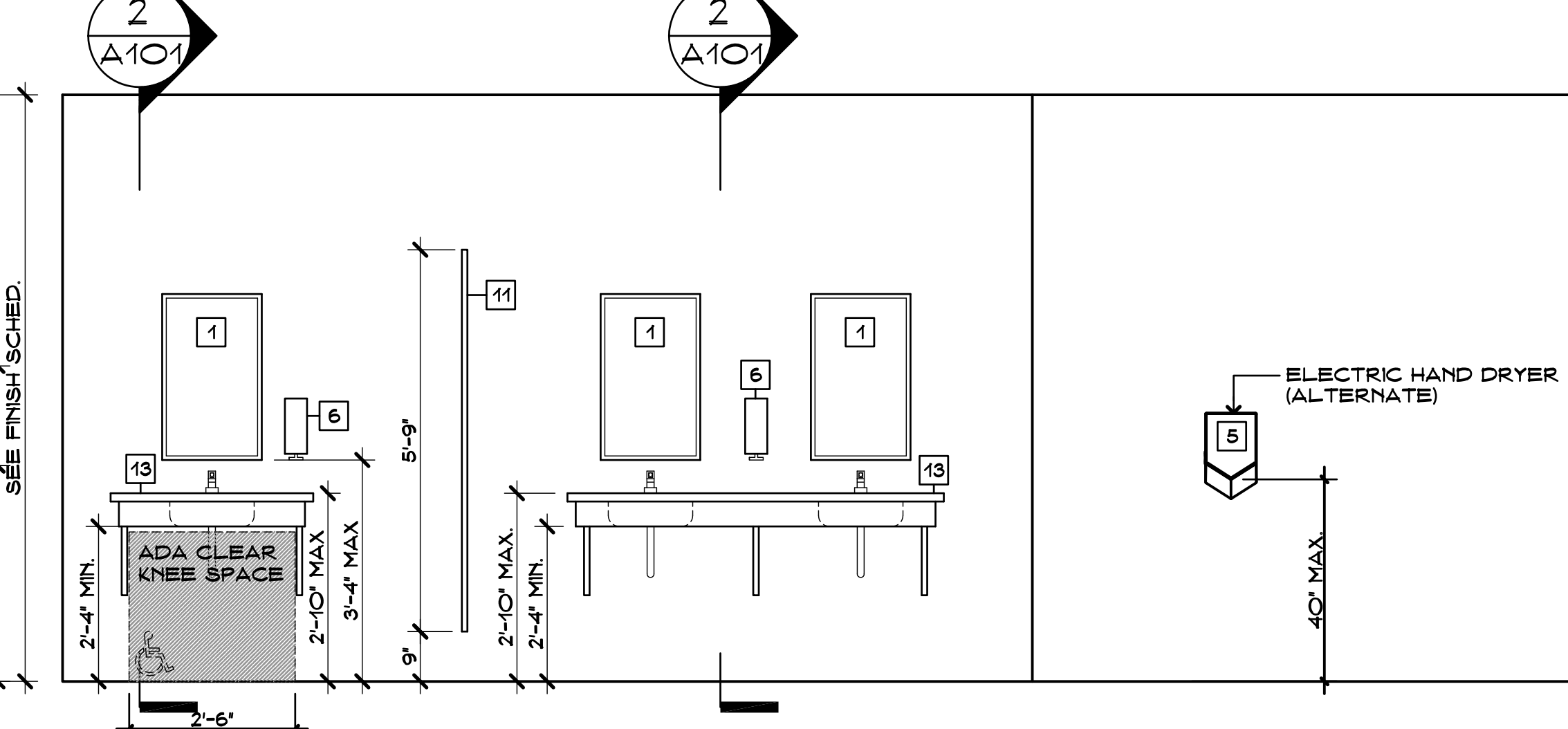


TOILET ELEVATION
SCALE: 1/2" = 1'-0"

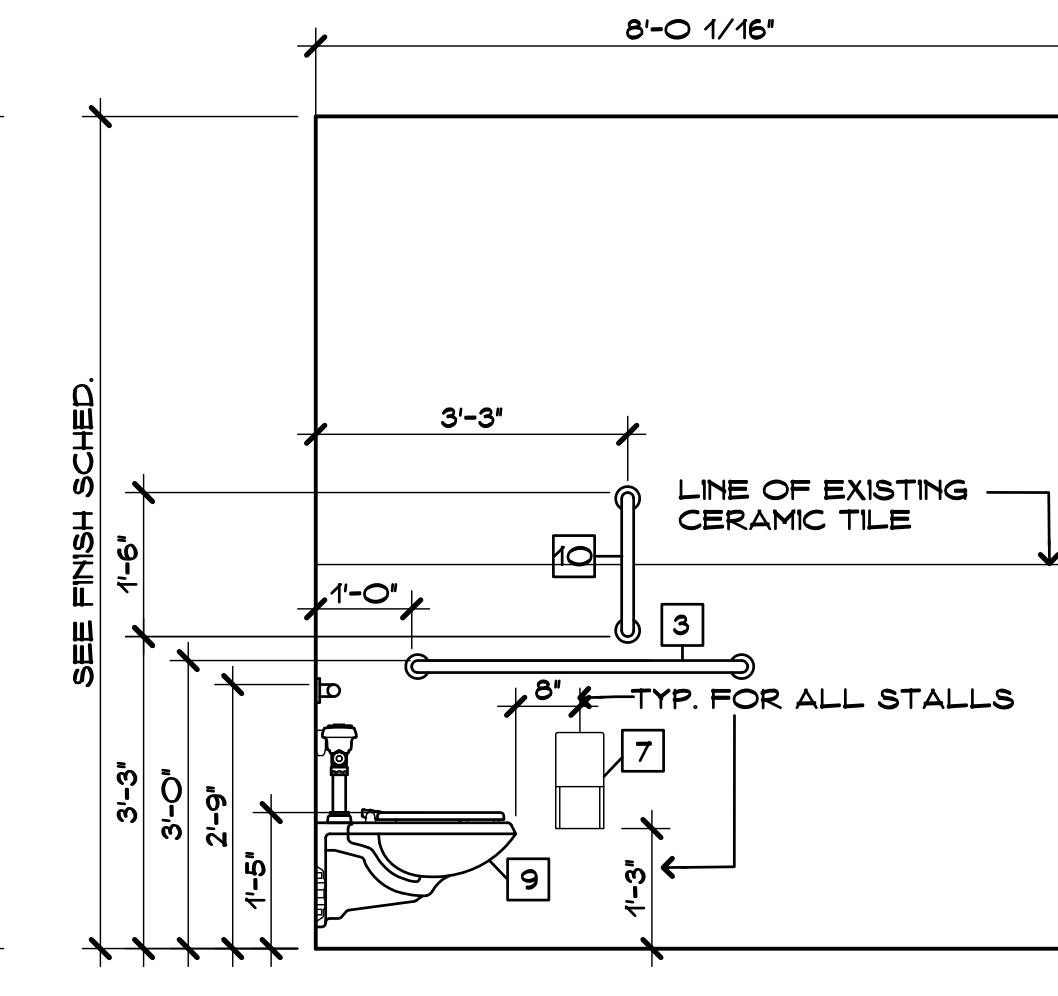


TOILET ELEVATION
SCALE: 1/2" = 1'-0"

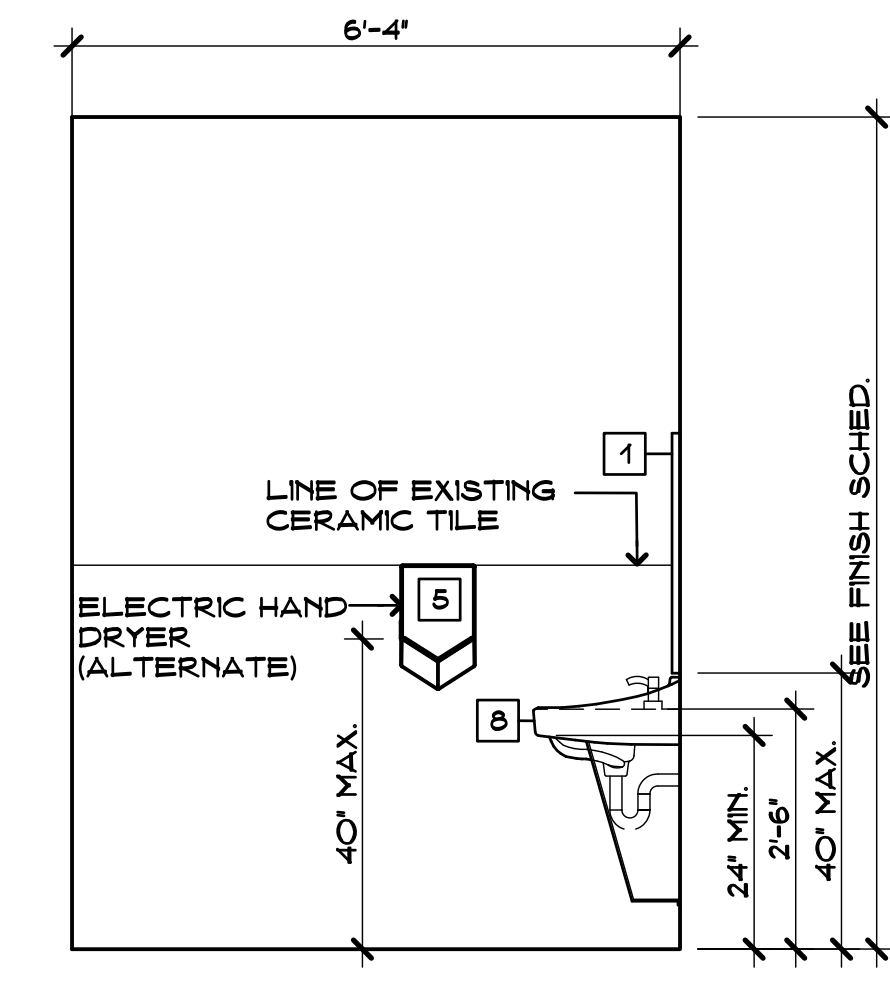
TOILET ELEVATION
SCALE: 1/2" = 1'-0"



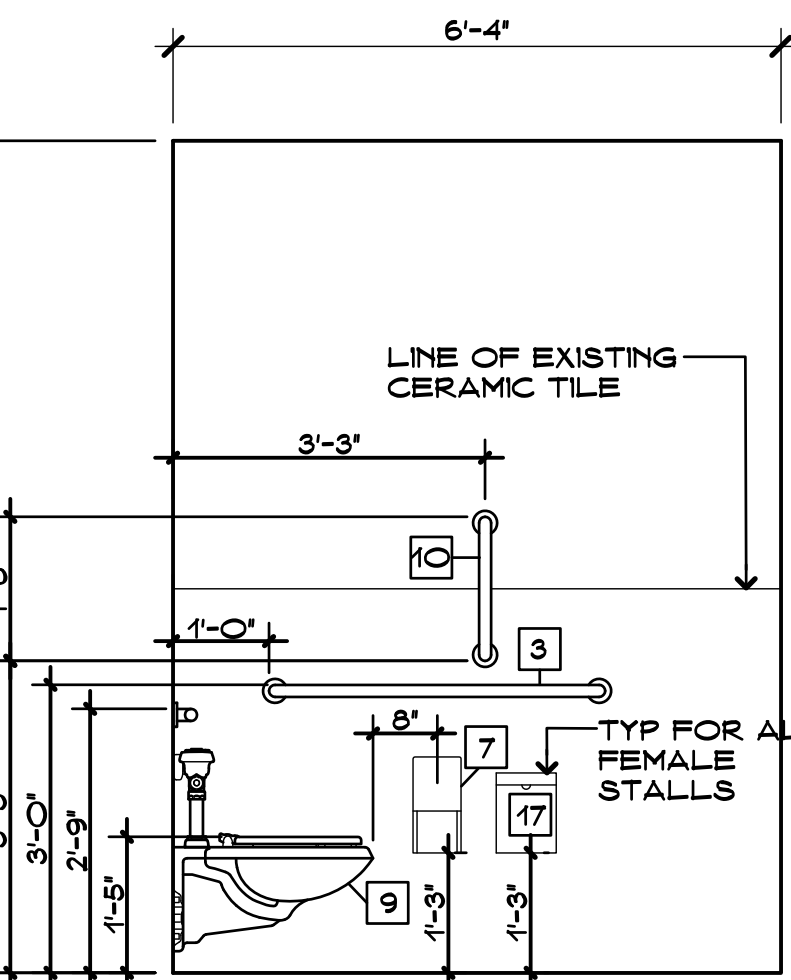
TOILET ELEVATION
SCALE: 1/2" = 1'-0"



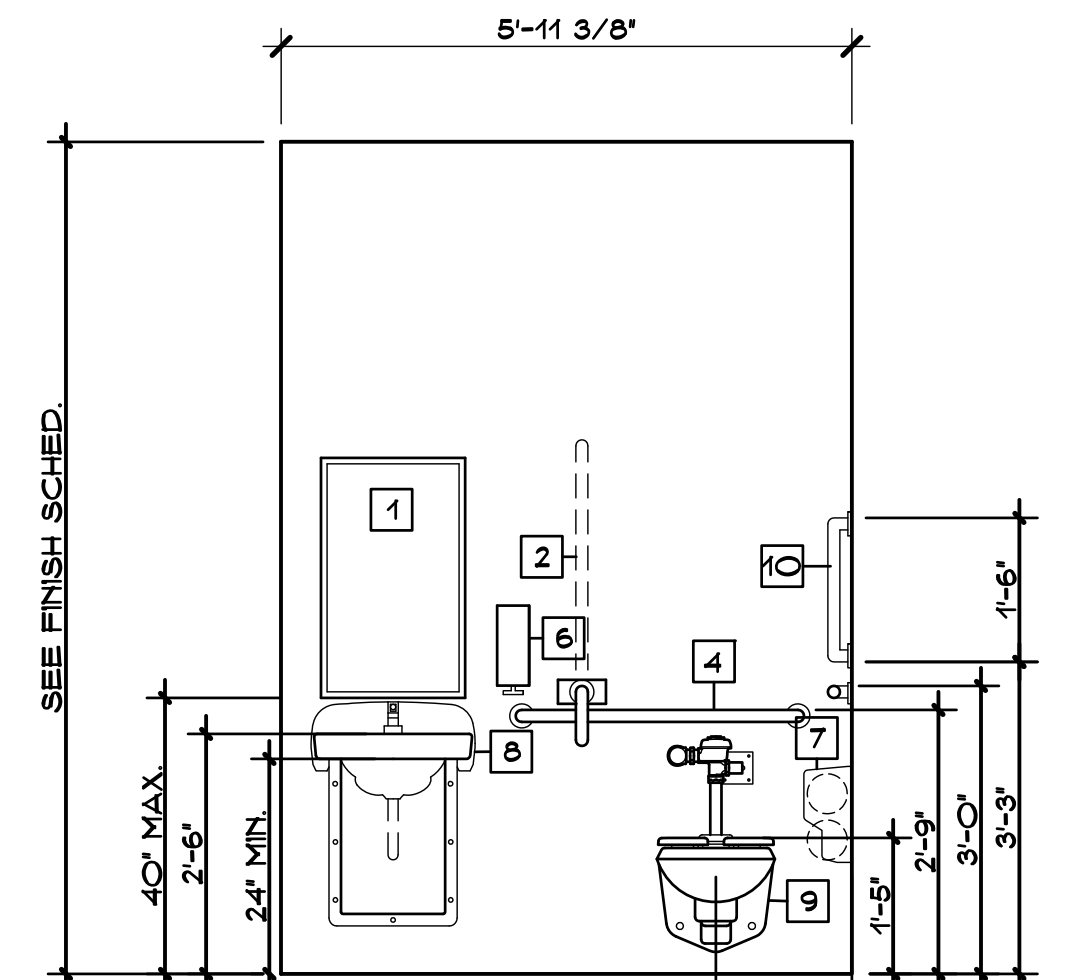
TOILET ELEVATION
SCALE: 1/2" = 1'-0"



TOILET ELEVATION
SCALE: 1/2" = 1'-0"



TOILET ELEVATION
SCALE: 1/4" = 1'-0"



TOILET ELEVATION
SCALE: 1/4" = 1'-0"

SYMBOL LEGEND

- EXISTING WALLS TO REMAIN
- NEW CONCRETE MASONRY UNIT WALLS
- NEW COLD FORMED METAL STUD WALLS
- ACCESSIBLE STATION OR SINK FLOOR SPACE
- DOOR NUMBER - SEE DOOR SCHEDULE
- ROOM NUMBER
- DEMOLITION NOTES
- PARTITION TYPES - SEE DRAWING A101
- ELEVATION OR SECTION NUMBER DRAWING NUMBER
- PLAN, SECTION, DETAIL, OR ELEV. NUMBER DRAWING NUMBER
- E.F.D. EXISTING FLOOR DRAIN
- H.D.F. HANDICAPPED DRINKING FOUNTAIN

GENERAL NOTES

1. CONTRACTORS SHALL FIELD VERIFY ALL CONDITIONS AND DIMENSIONS.
2. PATCH TO MATCH ALL EXISTING WALLS AFFECTED BY NEW WORK.
3. ALL DIMENSIONS ARE TO OUTSIDE FACE OF BRICK, CONCRETE MASONRY UNITS AND GYPSUM WALL BOARD.
4. ALL NEW WALLS AND PARTITIONS ASSEMBLIES SHALL EXTEND TO UNDERSIDE OF DECK ABOVE.

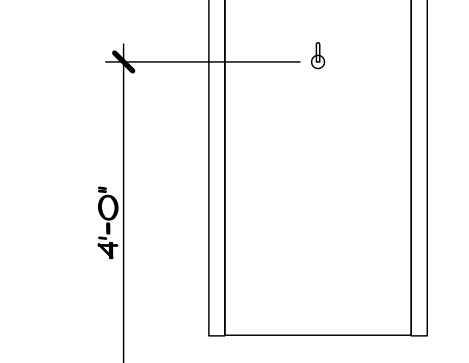
DEMOLITION NOTES

1. REMOVE EX. ACT AND SUPPORTING GRID. OWNER HAS FIRST RIGHT OF REFUSAL ON CL.G. DEVICES.
2. REMOVE EXIST. GYP. CEILING.
3. REMOVE EXIST. DOOR AND FRAME.
4. REMOVE EXIST. PLUMBING FIXTURES, TOILET ACCESSORIES AND ASSOC. EQUIP. AS REQ'D. SEE PLUMB. DWGS.
5. NOT USED.
6. REMOVE EXIST. INTERIOR MASONRY WALL FROM TOP OF SLAB TO UNDERSIDE OF DECK ABOVE. TOOTH INTO EXISTING AS NECESSARY.
7. REMOVE PORTION OF MASONRY WALL PER INSTALLATION OF NEW DOOR. REMOVE TO NEXT MASONRY JOINT TO ALLOW FOR NEW BLOCK TO BE TOOTHED-IN.
8. REMOVE EXIST. LIGHT FIXTURES.
9. REMOVE EXIST. DOOR AND REUSE AT SAME LOCATION.

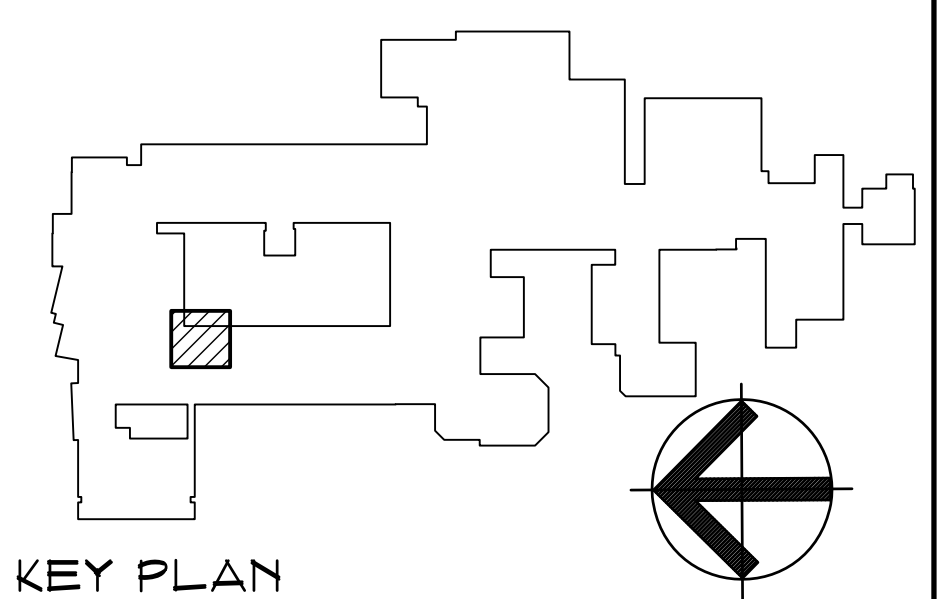
TOILET ACCES. LEGEND

1. 18"x30" WALL MOUNTED MIRROR
2. 30" SWING AWAY GRAB BAR
3. 42" GRAB BAR
4. 36" GRAB BAR
5. SURFACE MTD. ELECTRIC HAND DRYER
6. SURFACE MTD. SOAP DISPENSER
7. SURFACE MTD. TOILET PAPER DISPENSER
8. WALL MTD. LAVATORY
9. WALL MTD. WATER CLOSET
10. 18" VERTICAL GRAB BAR
11. FLOOR MTD. TOILET PARTITION (SEE PROJ. MAN.)
12. WALL MTD. URINAL
13. SOLID SURFACE COUNTER WITH INTEGRATED SINK
14. (NOT USED)
15. (NOT USED)
16. URINAL SCREEN
17. SURFACE MTD. SANITARY NAPKIN DISPOSAL (8 ALL FEMALE & UNISEX BATHROOM STALLS)

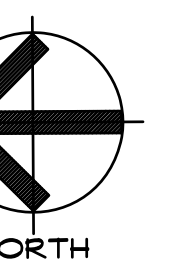
SEE ELEV. FOR MOUNTING HEIGHTS. MOUNTING HEIGHTS SHALL CONFORM TO THE MOST RESTRICTIVE CODE FOR ALL TOILET ACCESSORIES.



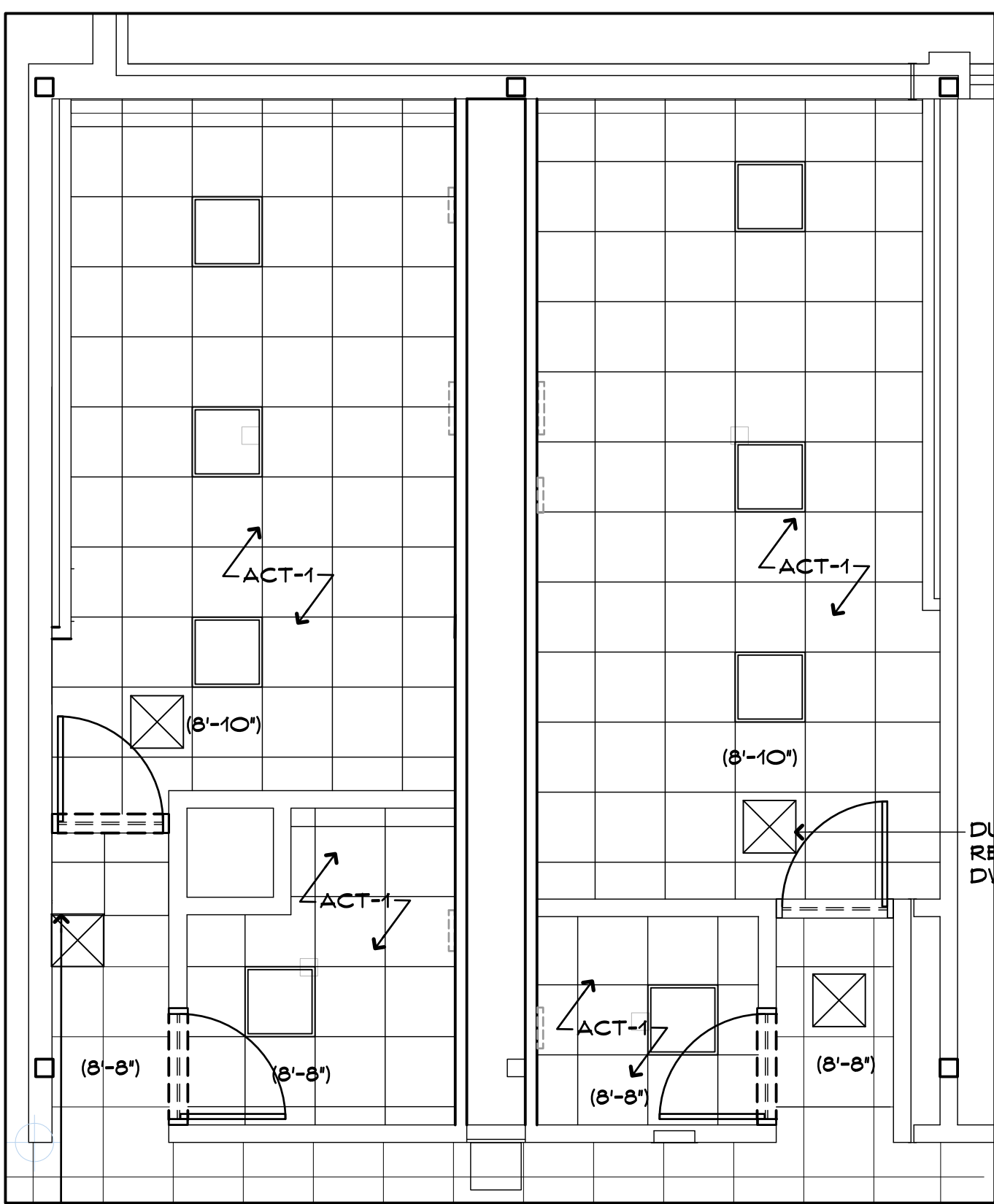
* ALL BATHROOM STALL DOORS TO HAVE ROBE HOOK MOUNTED 48" ABOVE F.F.



KEY PLAN

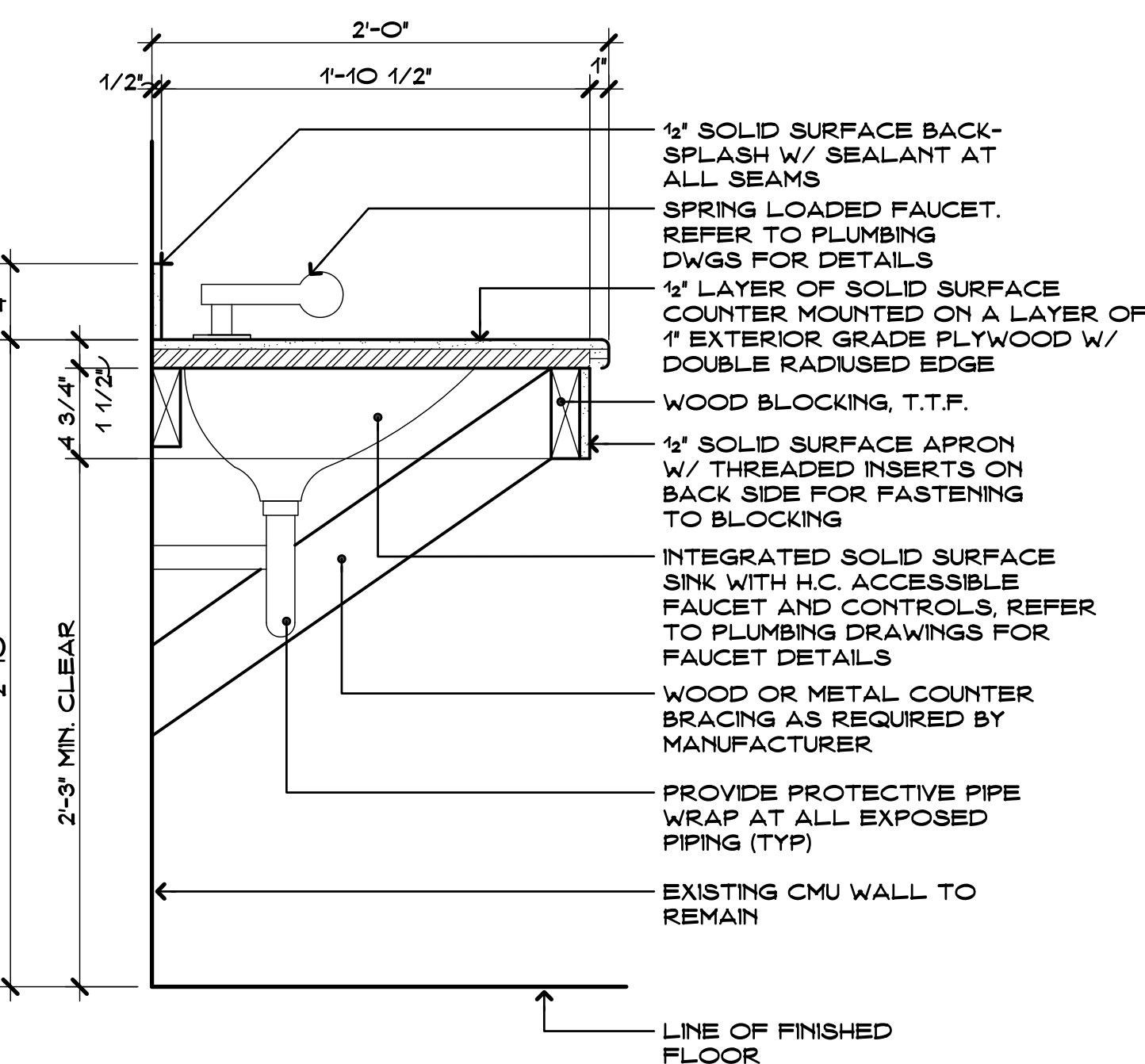


NORTH



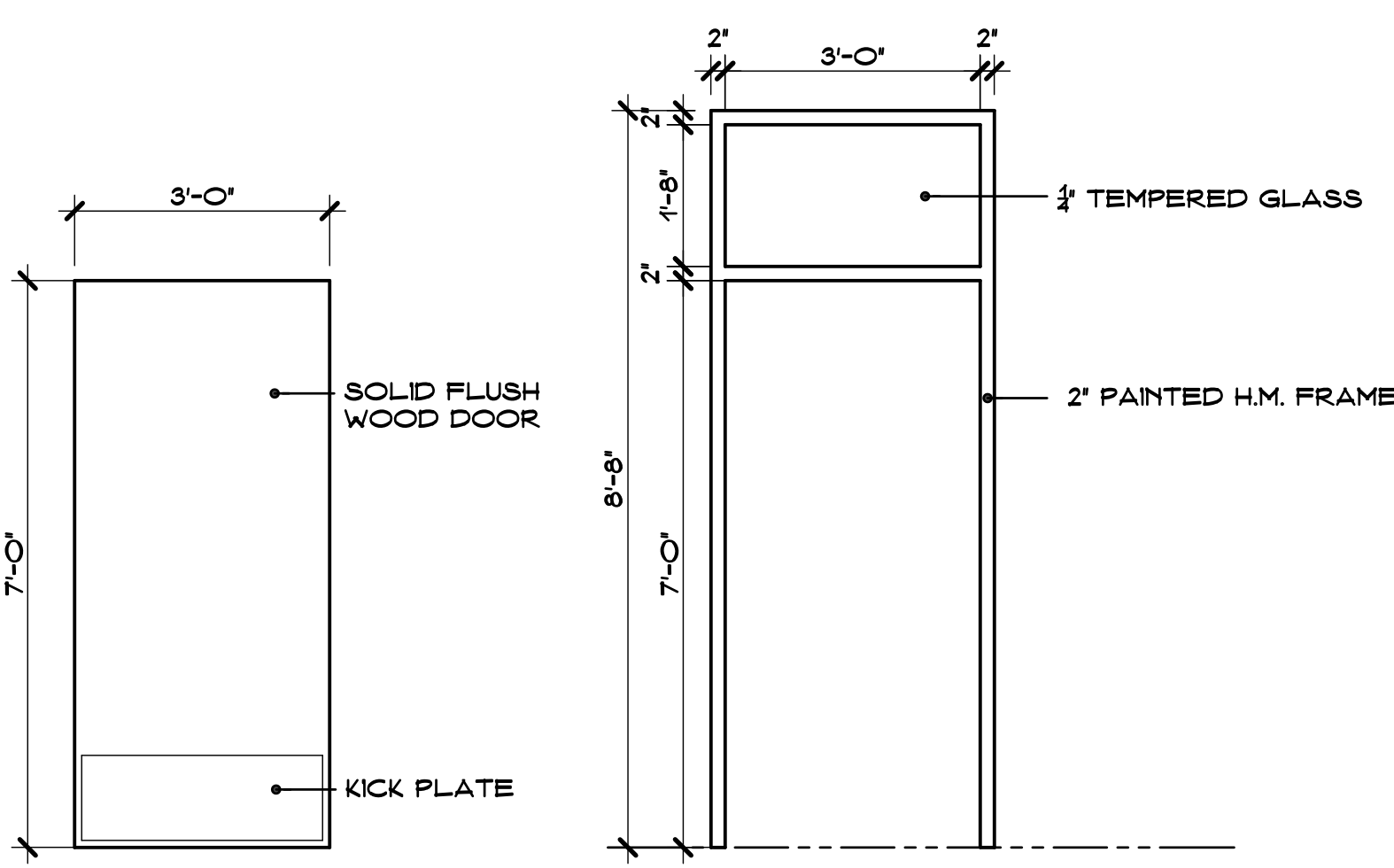
CEILING PLAN

SCALE: 1/4" = 1'-0"
REFER TO ELEC. DWGS. FOR LIGHTING INFORMATION



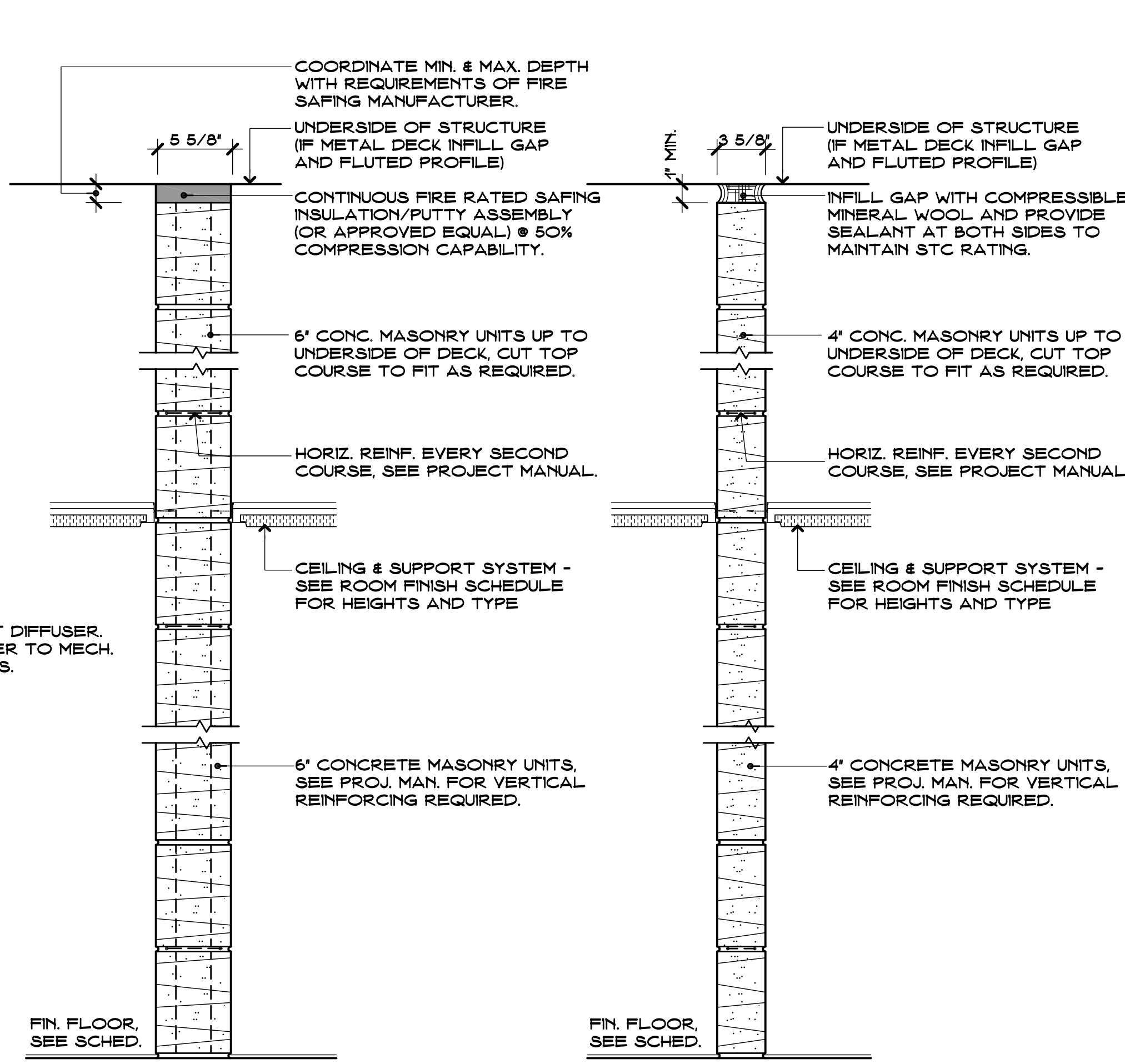
COUNTER SECTION DETAIL

SCALE: 1/2" = 1'-0"



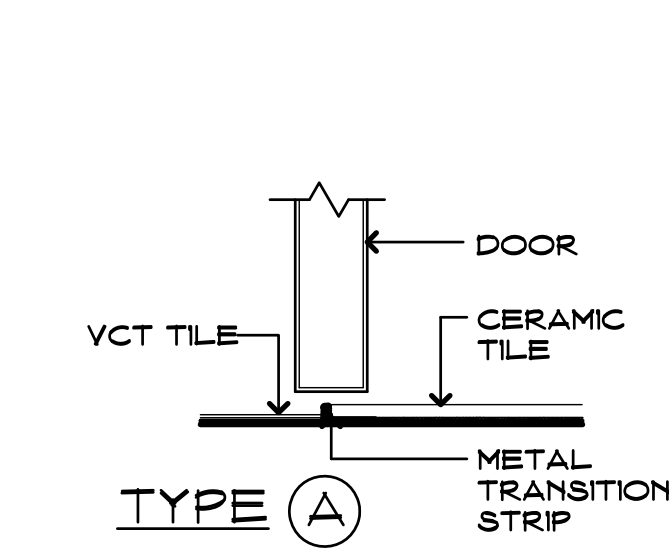
DOOR & FRAME ELEVATIONS

SCALE: 1/2" = 1'-0"



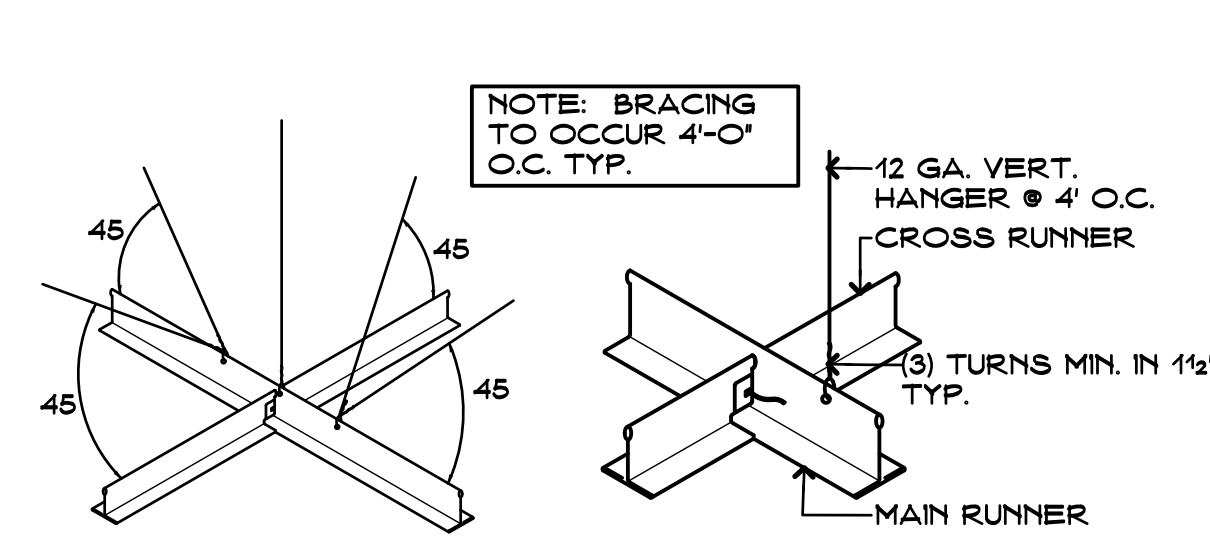
WALL TYPES

SCALE: 1 1/2" = 1'-0"



FLOOR TRANSITION DETAIL

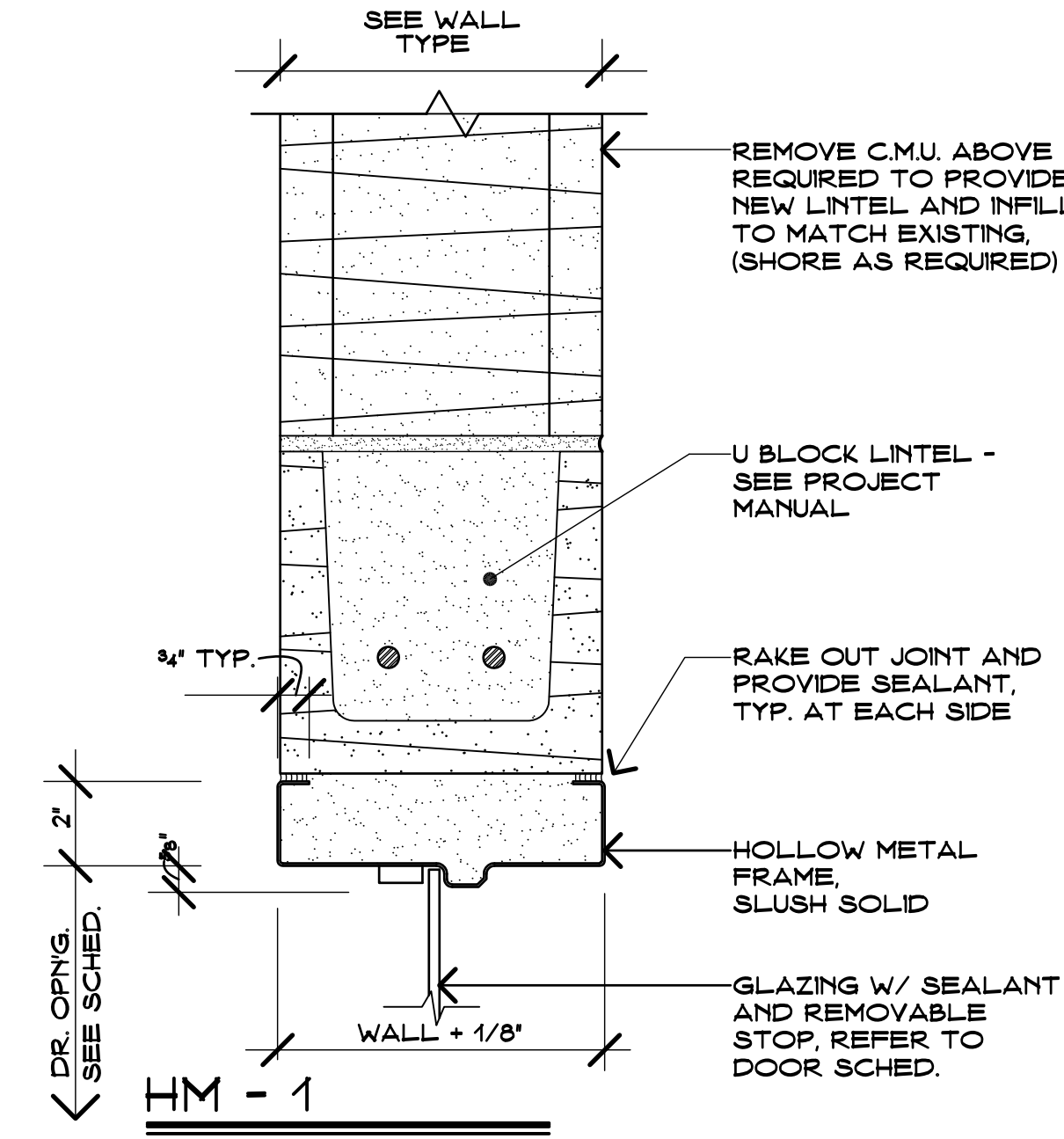
SCALE: 3/4" = 1'-0"



SEISMIC BRACING

CEILING DETAILS

SCALE: NONE



DOOR HEAD AND JAMB DETAILS

SCALE: 3/4" = 1'-0"

ROOM FINISH SCHEDULE - FIRST FLOOR

ROOM NO.	ROOM NAME	FLOOR FLR. FIN.	FLOOR BASE	WALL FINISH				CEILING		NOTES
				NORTH	EAST	SOUTH	WEST	MAT'L.	HGHT.	
101	BOYS TOILET	EPOXY	-	PAINTED BLOCK	PAINTED BLOCK	PAINTED BLOCK	PAINTED BLOCK	ACT-1	8'-10"	
102	GIRLS TOILET	EPOXY	-	PAINTED BLOCK	PAINTED BLOCK	PAINTED BLOCK	PAINTED BLOCK	ACT-1	8'-10"	
103	MEN'S TOILET	EPOXY	-	PAINTED BLOCK	PAINTED BLOCK	PAINTED BLOCK	PAINTED BLOCK	ACT-1	8'-8"	PAIN ABOVE WAINS COATING ONLY
104	WOMEN'S TOILET	EPOXY	-	PAINTED BLOCK	PAINTED BLOCK	PAINTED BLOCK	PAINTED BLOCK	ACT-1	8'-8"	PAIN ABOVE WAINS COATING ONLY

GENERAL FINISH NOTES

- PATCH AND REPAIR ALL DAMAGED FLOOR TILE BEFORE APPLYING EPOXY COATING

LEGEND

ACT ACOUSTIC CEILING TILE

DOOR SCHEDULE

DOOR				FRAME				FIRE RATING	HARDWARE - SEE PROJECT MANUAL												REMARKS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
DOOR NUMBER	ROOM NUMBER	SIZE	TYPE - SEE 3/A101	MATERIAL	HEAD DETAIL	JAMB DETAIL	SADDLE DETAIL SEE 5/A101		GLAZING	FIRE CODE				DISABLED REQUIREMENTS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
		DOUBLE LEAF DOOR								2'-3" X 7'-0"	3'-0" X 7'-0"	RESISTS PASSAGE OF SMOKE	90 MINUTE LABELED	60 MINUTE LABELED	45 MINUTE LABELED	NOT REQUIRED	PANIC RELEASE LATCH	POSITIVE LATCHING	AUTOMATIC CLOSER	ELECTRO-MAGNETIC HOLD		DELAYED ACTION CLOSER	PUSH PLATE/PULL HANDLE	ALARMED EXIT SEE ELEC.	POWER ASSIST OPERATOR	LEVER HANDLES	PROTECTION PLATE	TACTILE WARNING	ACCESSIBLE THRESHOLD	SIGNAGE	SIGN TYPE	SIGNAGE TEXT (COORDINATE FINAL TEXT WITH OWNER AND ARCHITECT)	FOR DETAILS, MOUNTING HEIGHT AND LOCATION SEE DETAIL: 14 / A100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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GENERAL DOOR NOTES

- CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS & DIMENSIONS.
- ALL NEW KICK PLATES SHALL BE 16" HIGH AND OFFSET 1" FROM EDGES OF DOOR UNLESS OTHERWISE NOTED AND CENTERED AT BOTTOM OF DOOR.

SCHEDULE REMARKS

- EXISTING FRAME TO REMAIN - CHANGE SWING OF EXISTING DOOR.
- EXISTING DOOR - VERIFY EXISTING HARDWARE MEETS THAT REQUIRED IN SCHEDULE/CODE.
- CUT BOTTOM OF DOOR TO ALLOW 1" GAP FOR AIR MAKEUP.

R.C.P. SYMBOL LEGEND

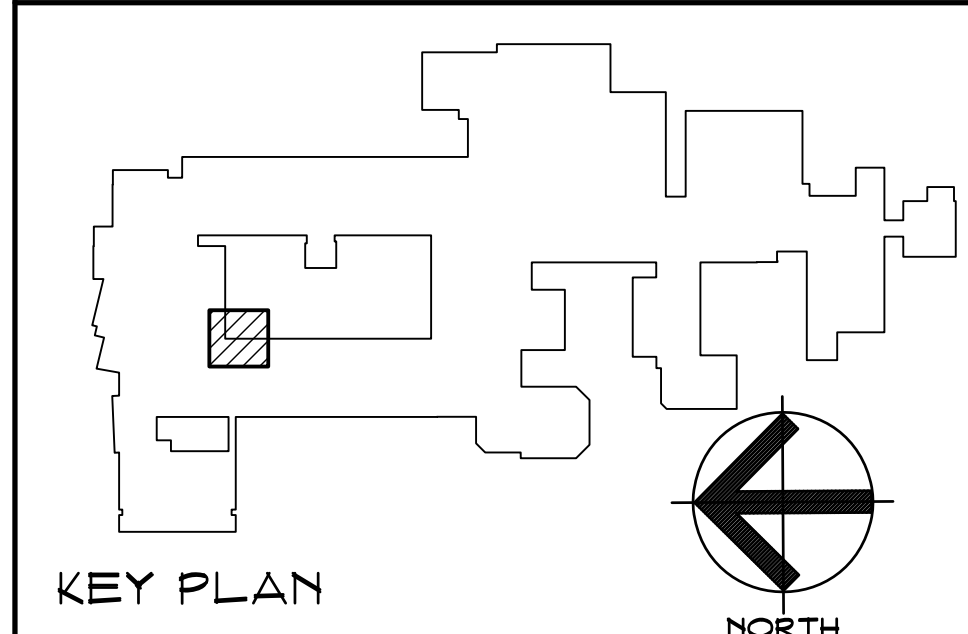
- 2' X 2' SUSPENDED ACOUSTICAL CEILING SYSTEM, SEE FINISH SCHEDULE AND PROJECT MANUAL.
- LIGHTING FIXTURES, SEE ELECTRICAL LIGHTING DRAWINGS.
- SUPPLY AND RETURN CEILING COVERS, SEE MECHANICAL DRAWINGS.
- (9'-4") INDICATES CEILING HEIGHT

R.C.P. GENERAL NOTES

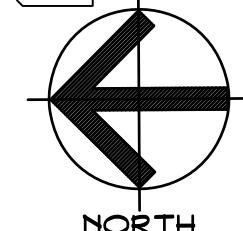
- FOR ADDITIONAL LIGHTING INFORMATION - SEE ELECTRICAL DRAWINGS.
- FOR ADDITIONAL MECHANICAL INFORMATION - SEE MECHANICAL DRAWINGS.
- FOR CEILING HEIGHTS AND TYPE OF TILE OR PANEL, SEE ALSO ROOM FINISH SCHEDULE AND PROJECT MANUAL.
- FOR SEISMIC BRACING AT ALL ACT - SEE CEILING DETAILS 7/A101.

WALL TYPE NOTES

- AT FIRE RATED WALLS SEAL ALL DUCT, PIPE AND MISCELLANEOUS PENETRATIONS THROUGH WALL WITH SAFING INSULATION/PUTTY ASSEMBLY AS REQUIRED TO MEET FIRE RATING. TO RESIST THE PASSAGE OF SMOKE AND TO MAINTAIN MINIMUM STC RATING INDICATED. SEE ALSO CODE PLANS, OTHER DRAWINGS AND PROJECT MANUAL FOR ADDITIONAL INFORMATION.
- AT FIRE RATED WALL INTERSECTIONS WITH BEAMS, JOISTS OR OTHER STRUCTURAL ELEMENTS, PROVIDE GAP AT PERIMETER TO ALLOW INSTALLATION OF INSULATION/PUTTY ASSEMBLY AS REQUIRED TO MEET FIRE RATING. TO RESIST THE PASSAGE OF SMOKE AND TO MAINTAIN STC RATING INDICATED. SEE ALSO CODE PLANS, OTHER DRAWINGS AND PROJECT MANUAL FOR ADDITIONAL INFORMATION.
- AT WALLS NOT REQUIRED TO BE FIRE RATED, SEAL ALL DUCT, PIPE AND MISCELLANEOUS PENETRATIONS THROUGH WALL WITH ACOUSTICAL MINERAL WOOL AND PROVIDE NON-COMBUSTIBLE SEALANT AT PERIMETER OF PENETRATION ON BOTH FACES OF WALL TO MAINTAIN STC RATING INDICATED.
- AT WALLS NOT REQUIRED TO BE FIRE RATED, SEAL AT PERIMETER OF INTERSECTION WITH BEAMS, JOISTS OR OTHER STRUCTURAL ELEMENTS WITH ACOUSTICAL MINERAL WOOL AND PROVIDE NON-COMBUSTIBLE SEALANT ON BOTH FACES OF WALL TO MAINTAIN STC RATING INDICATED.
- AT ALL CONCRETE MASONRY UNIT WALLS, PROVIDE RADUSED (BULL NOSED) SHAPE AT ALL EXPOSED CORNERS. TYPICAL IF CORNERS ARE LESS OR MORE THAN 90 DEGREES AND BULL NOSE TYPE IS NOT PRACTICAL. PROVIDE MITERED UNITS AND GROUND CORNERS SMOOTH AND ROUND PRIOR TO FINISHING.



KEY PLAN



NORTH

Bathroom Plumbing Repairs

Ledyard High School
24 Gallup Hill Road
Ledyard, Connecticut 06339



SILVER / PETRUCELLI + ASSOCIATES
Architects / Engineers / Interior Designers

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Revision: APPENDUM #1 Date: 7-1-15 Revised By: R. GLICK

Drawing Title:

TOILET DRAWINGS

Date: FEBRUARY 29, 2016

Scale: AS NOTED

Drawn By: R. GLICK

Project Number: 15-139

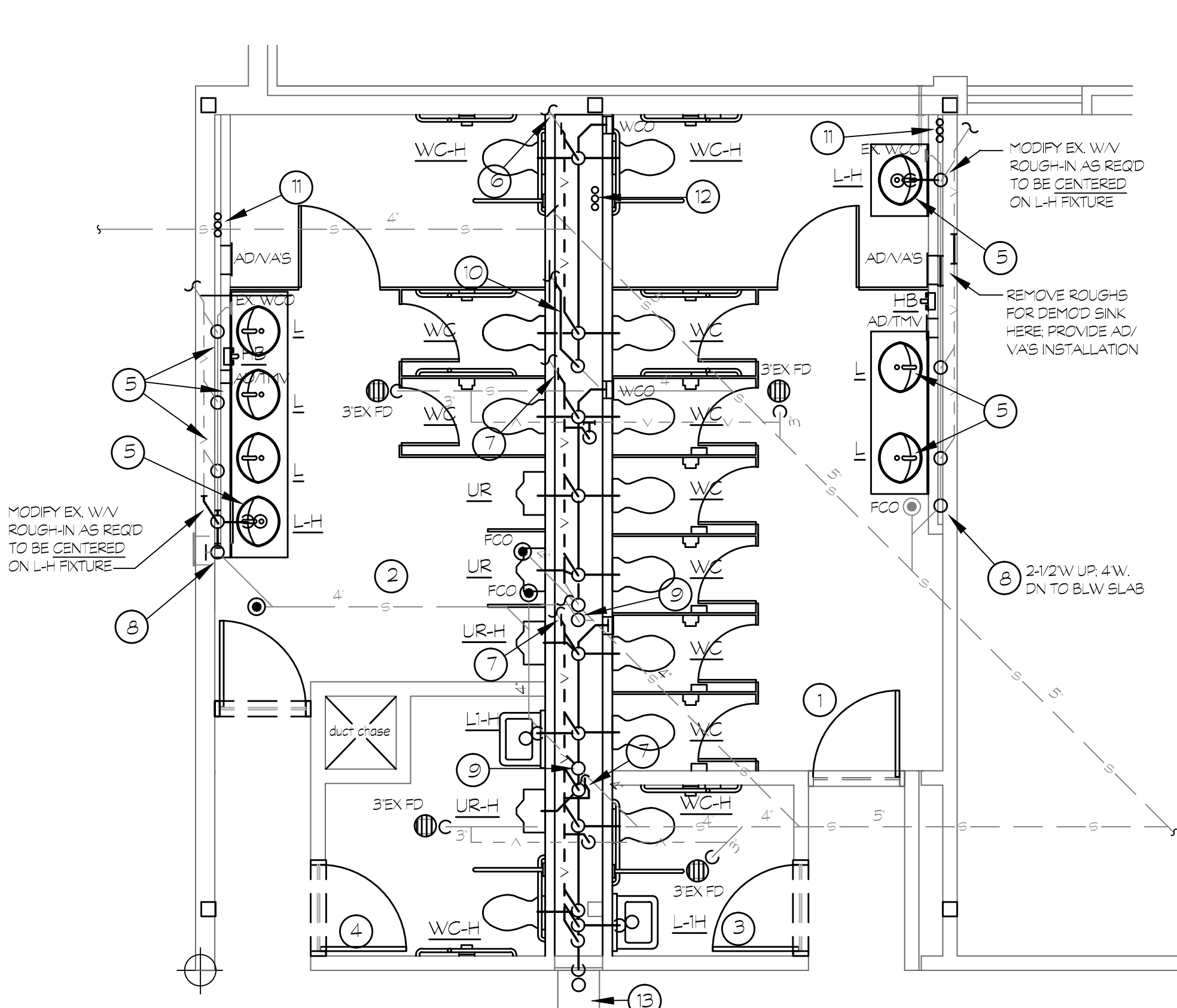
Drawing Number:

A101

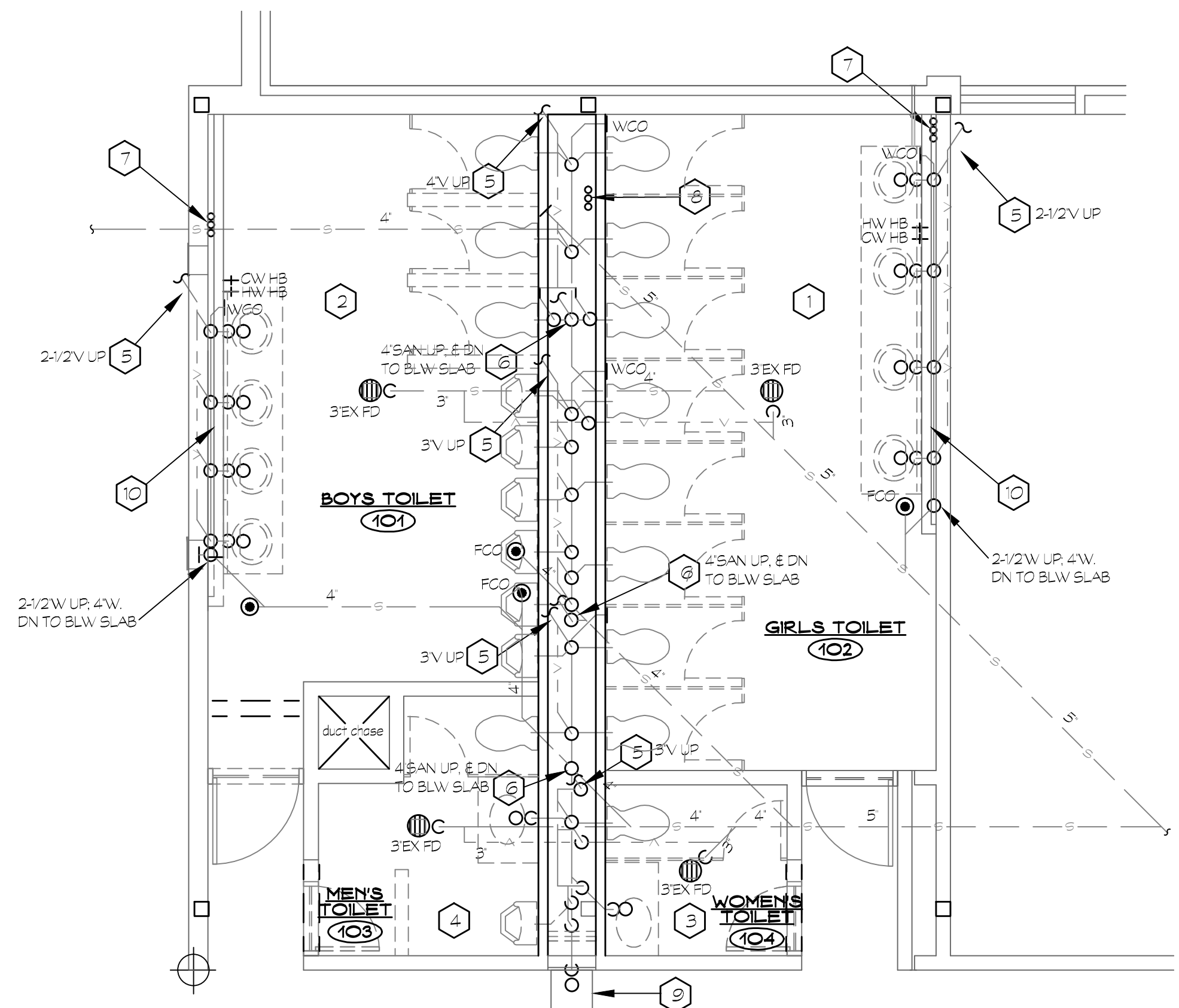
PLUMBING PIPING SYSTEM LEGEND		
EXISTING	NEW	DESCRIPTION
---	---	DOMESTIC COLD WATER
---	---	DOMESTIC HOT WATER SUPPLY
---	---	DOMESTIC HOT-HOT WATER SUPPLY
---	---	DOMESTIC HOT WATER RETURN
---	---	SANITARY WASTE
---	---	SANITARY WASTE BELOW SLAB
---	---	SANITARY VENT
---	---	STORY DRAIN
---	---	STORY DRAIN BELOW SLAB
---	---	OVERFLOW STORY
---	---	NATURAL GAS
---	---	NATURAL GAS BELOW SLAB
---	---	RADON VENT
---	---	COMPRESSED AIR
---	---	CONDENSATE DRAIN
---	---	FORCE MAIN
---	---	FORCE MAIN BELOW SLAB
---	---	INDIRECT WASTE
---	---	GREASE WASTE
---	---	GREASE WASTE BELOW SLAB
---	---	ACD WASTE
---	---	ACD WASTE BELOW SLAB
---	---	ACD VENT
---	---	OIL WASTE
---	---	OIL WASTE BELOW SLAB

PLUMBING ABBREVIATIONS	
ABBREVIATION	DESCRIPTION
ADA	AMERICAN DISABILITIES ACT
ABF	ABOVE FINISHED FLOOR
BLDG	BUILDING
CONT	CONTINUED
CV	CHECK VALVE
OW	COLD WATER
D.F.U.	DRAINAGE FIXTURE UNITS
DA	DIAMETER
DN	DOWN
DWG	DRAWING
EA	EACH
E.C.	ELECTRICAL CONTRACTOR
EX	EXISTING
FCD	FLOOR CLEANOUT
FD	FLOOR DRAIN
FF	FINISHED FLOOR
FLR	FLOOR
FT	FEET
FL	FIXTURE UNITS
GAL	GALLONS
G.C.	GENERAL CONTRACTOR
GPF	GALLONS PER FLUSH
GPM	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HW	HOT WATER
HWR	HOT WATER REGULATION
MAX	MAXIMUM
M.C.	MECHANICAL CONTRACTOR
MN	MINIMUM
MISC	MISCELLANEOUS
N/C	NOT IN CONTRACT
NTS	NOT TO SCALE
P.C.	PLUMBING CONTRACTOR
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
RAD	RADIUS
SF	SQUARE FEET
TP	TRAP PRIMER
TPR	TYPICAL
U.O.N	UNLESS OTHERWISE NOTED
V	VENT
VB	VACUUM BREAKER
V.F.	VERIFY IN FIELD
VS	VENT STACK
VTR	VENT THROUGH ROOF
WCO	WALL CLEANOUT
WH	WALL HYDRANT
WS	WASTE STACK
YCO	YARD CLEANOUT
Ø	DIAMETER

PLUMBING SYMBOL LEGEND	
SYMBOL	DESCRIPTION
	AIR ADMITTING VALVE
	BALANCING VALVE
	BALL VALVE
	VALVE IN UNDERGROUND BOX
	BACKWATER VALVE
	CHECK VALVE
	GAS VALVE
	PRESSURE RELIEF VALVE
	THERMOSTATIC MIXING VALVE
	GATE VALVE
	SUPPLY VALVE
	METER
	REDUCED PRESSURE BACKFLOW PREVENTER
	CLOTHES WASHER CONNECTION
	FLOOR CLEANOUT
	WALL CLEANOUT
	YARD CLEANOUT
	FLOOR DRAIN
	FLOOR DRAIN WITH FUNNEL
	FLOOR SINK WITH FULL GRATE
	FLOOR SINK WITH HALF GRATE
	FLOOR SINK WITH THREE-QUARTER GRATE
	HUB DRAIN
	ROOF DRAIN
	ROOF OVERFLOW DRAIN
	TRENCH DRAIN
	EXISTING HOSE BIBB
	POINT OF NEW CONNECTION TO EXISTING
	POINT OF DISCONNECTION (IF USED); REFER TO SCOPE NOTES
	VENT THROUGH ROOF
	RECIRCULATION PUMP
	WATER HAMMER ARRESTOR
	TRAP PRIMER
	P TRAP
	WALL HYDRANT
	PPE DOWN
	PIPE UP
	CAPPED PIPE
	CLEANOUT PLUG
	UNION
	DIRECTION OF FLOW
	PLUMBING FIXTURE
	ADA COMPLIANT PLUMBING FIXTURE
	NEW HEAV MINNS HOSE BIBB



NEW WORK PLAN KEY NOTES	
GENERAL: REFER TO ARCHITECTURAL DRAWINGS FOR EXACT EXTENT OF NEW WORK.	
1	GIRLS TOILET ROOM: PROVIDE ALL NEW PLUMBING FIXTURES AND SUPPORTS: (7) WALL-MOUNT FLUSH VALVE WATER CLOSETS, (1) H/C MIXING HOSE BIBB, PROVIDE ROUGH-IN MODIFICATIONS; FAUCETS, DRAINS, FINAL PIPING CONNS FOR (3) NEW LAVATORIES (L, L-H) FURNISHED INTEGRAL TO COUNTERS, SCOUR-CLEAN EXISTING FDS STRAINER, PRIME PD TRAP AND PROVIDE BARRIER-TYPE TRAP PRIMER PROTECTION DEVICE WHICH HAS BEEN SUCCESSFULLY TESTED TO ASSE 1072.
2	BOYS TOILET ROOM: PROVIDE ALL NEW PLUMBING FIXTURES AND SUPPORTS: (3) WALL-MOUNT FLUSH VALVE WATER CLOSETS, (3) WALL-MOUNT FLUSH VALVE URINALS, AND (1) H/C MIXING HOSE BIBB, PROVIDE ROUGH-IN MODIFICATIONS; FAUCETS, DRAINS, FINAL PIPING CONNS FOR (4) NEW LAVATORIES (L, L-H) FURNISHED INTEGRAL TO COUNTERS, SCOUR-CLEAN EXISTING FDS STRAINER, PRIME PD TRAP AND PROVIDE BARRIER-TYPE TRAP PRIMER PROTECTION DEVICE WHICH HAS BEEN SUCCESSFULLY TESTED TO ASSE 1072.
3	WOMEN'S STAFF TOILET ROOM: BASE BID: PROVIDE ALL NEW PLUMBING FIXTURES, SERVICE PIPING AND SUPPORTS: (1) WALL-MOUNT FLUSH VALVE WATER CLOSET, (1) WALL-MOUNT LAVATORY, SCOUR-CLEAN EXISTING FDS STRAINER, PRIME PD TRAP AND PROVIDE BARRIER-TYPE TRAP PRIMER PROTECTION DEVICE WHICH HAS BEEN SUCCESSFULLY TESTED TO ASSE 1072. DEDUCT ALTERNATE: PROVIDE ALL NEW SERVICE PIPING, NEW W/C CARRIER AND ROUGH-INS, CLEAN AND REINSTALL EXISTING FIXTURES IN SAME LOCATIONS; CONNECT FIXTURES TO NEW ROUGH-INS.
4	MEN'S STAFF TOILET ROOM: BASE BID: PROVIDE ALL NEW PLUMBING FIXTURES, SERVICE PIPING AND SUPPORTS: (1) WALL-MOUNT FLUSH VALVE WATER CLOSET, (1) WALL-MOUNT FLUSH VALVE URINAL, (1) WALL-MOUNT LAVATORY, SCOUR-CLEAN EXISTING FDS STRAINER, PRIME TRAP AND PROVIDE BARRIER-TYPE TRAP PRIMER PROTECTION DEVICE WHICH HAS BEEN SUCCESSFULLY TESTED TO ASSE 1072. DEDUCT ALTERNATE: PROVIDE ALL NEW SERVICE PIPING, NEW W/C & UR CARRIERS AND ROUGH-INS, CLEAN AND REINSTALL EXISTING FIXTURES IN SAME LOCATIONS; CONNECT FIXTURES TO NEW ROUGH-INS.
5	EXISTING WALL PENETRATIONS MAY BE REUSED IF FEASIBLE. CUT CHASE WALL (PROVIDING TEMPORARY SUPPORT) AS REQ'D TO MAKE NECESSARY PIPING MODIFICATIONS AND TO PROVIDE TEMPERATURE LAV WATER SUPPLY FOR NEW LAV FIXTURES.
6	PROVIDE NEW 3\"/>



DEMOLITION PLAN KEY NOTES	
GENERAL: REFER TO ARCHITECTURAL DRAWINGS FOR EXACT EXTENT OF DEMOLITION WORK. EXISTING SYSTEMS TAKEN FROM RECORD DRAWINGS AND LIMITED FIELD VERIFICATIONS. VIF ALL EXISTING SYSTEMS AND ADJUST FINAL DEMOLITION AND NEW WORK TO COORDINATE WITH SAME.	
1	EXISTING GIRLS TOILET ROOM: DISCONNECT AND REMOVE ALL EXISTING PLUMBING FIXTURES AND SUPPORTS: (3) WALL-MOUNT FLUSH VALVE WATER CLOSETS, (4) COUNTER-MOUNTED LAVATORIES AND (1) SET OF HEAVY LOOSE KEY-OPERATED WASH-DOWN HOSE BIBB BELOW LAV. COUNTER, FLOOR DRAIN SHALL REMAIN.
2	EXISTING BOYS TOILET ROOM: DISCONNECT AND REMOVE ALL EXISTING PLUMBING FIXTURES AND SUPPORTS: (3) WALL-MOUNT FLUSH VALVE WATER CLOSETS, (6) WALL-MOUNT FLUSH VALVE URINALS, (4) COUNTER-MOUNTED LAVATORIES AND (1) SET OF HEAVY LOOSE KEY-OPERATED WASH-DOWN HOSE BIBB LOCATED ON WALL BELOW COUNTER LEVEL. FLOOR DRAIN SHALL REMAIN.
3	EXISTING WOMEN'S STAFF TOILET ROOM: BASE BID: DISCONNECT AND REMOVE ALL EXISTING PLUMBING FIXTURES AND SUPPORTS: (1) WALL-MOUNT FLUSH VALVE WATER CLOSET, (1) COUNTER-MOUNTED LAVATORY, FLOOR DRAIN SHALL REMAIN. STAFF TOILET ROOM SHALL BE RENOVATED. DEDUCT ALTERNATE: DISCONNECT, REMOVE AND SAFELY STORE ALL EXISTING FIXTURES. REMOVE ALL RELATED WATER/WASTE/VENT SERVICES. REMOVE W/C SUPPORT.
4	EXISTING MEN'S STAFF TOILET ROOM: BASE BID: DISCONNECT AND REMOVE ALL EXISTING PLUMBING FIXTURES AND SUPPORTS: (1) WALL-MOUNT FLUSH VALVE WATER CLOSET, (1) WALL-MOUNT FLUSH VALVE URINAL, AND (1) COUNTER-MOUNTED LAVATORY, FLOOR DRAIN SHALL REMAIN. STAFF TOILET ROOM SHALL BE RENOVATED. DEDUCT ALTERNATE: DISCONNECT, REMOVE AND SAFELY STORE ALL EXISTING FIXTURES. REMOVE ALL RELATED WATER/WASTE/VENT SERVICES. REMOVE W/C AND UR SUPPORTS.
5	REMOVE EXISTING VENT PIPING IN CHASE SERVING THIS BATTERY OF 1ST FLOOR FIXTURES TO THE FOLLOWING POINTS: (1) JUST ABOVE FIN. FLOOR ON VENT PIPING RISING FROM BELOW SLAB, AND (2) HIGH AS POSSIBLE IN CHASE BEFORE PASSING INTO 2ND FLOOR TOILET ROOM CHASE ABOVE. REFER TO NEW WORK PLAN.
6	REMOVE EXISTING SANITARY AND/OR WASTE PIPING IN CHASE SERVING THIS BATTERY OF 1ST FLOOR FIXTURES TO THE FOLLOWING POINTS: (1) JUST ABOVE FIN. FLOOR, ON SAN AND/OR WASTE PRIOR TO BELOW SLAB, AND (2) JUST BELOW LOWEST FINAL CONNECTION OF 2ND FLOOR FIXTURE TO SAN STACK DOWN FROM 2ND FLOOR TOILET ROOM ABOVE. REFER TO NEW WORK PLAN.
7	1 HVEOW, 1 HWR FROM TUNNEL BELOW TO SERVE LAB BATTERIES IN 1ST & 2ND FLR TOILET ROOMS WITH RISER HEOW SHUTOFFS AND HWR BALANCING VALVE IN TUNNEL, 1 HVEOW, 1 HWR HORIZ. BRANCH MAINS IN CHASE TO SERVE 1ST FLOOR FIXTURES WITH BRANCH HEOW SHUTOFFS AND BRANCH HWR BALANCING VALVE BEHIND WALL ACCESS DOOR, 1 HVEOW, 1 HWR BRANCH RISERS CONTINUING UP TO SERVE 2ND FLOOR FIXTURES. REMOVE 1ST FLOOR HORIZONTAL BRANCH PIPING BACK TO RISER, INCLUDING BRANCH SHUTOFF AND BALANCING VALVES. REFER TO NEW WORK PLAN.
8	1 HW, 2 OW, 1 HWR FROM TUNNEL BELOW TO SERVE FIXTURES IN 1ST & 2ND FLR TOILET ROOMS WITH RISER HEOW SHUTOFFS AND HWR BALANCING VALVE IN TUNNEL, 1 HW, 2 OW, 1 HWR HORIZ. BRANCH MAINS IN CHASE TO SERVE 1ST FLOOR FIXTURES WITH BRANCH HEOW SHUTOFFS AND BRANCH HWR BALANCING VALVE BEHIND WALL ACCESS DOOR, 2 OW, 1 HW, 1 HWR BRANCH RISERS CONTINUING UP TO SERVE 2ND FLOOR FIXTURES. REMOVE 1ST FLOOR HORIZONTAL BRANCH PIPING BACK TO RISER, INCLUDING BRANCH SHUTOFF AND BALANCING VALVES. REFER TO NEW WORK PLAN.
9	RETAIN EXISTING WALL-MOUNTED WATER COOLER/BOTTLE FILLER AND SUPPORTS. DISCONNECT FROM AND REMOVE EXISTING WATER/WASTE/VENT SERVICES. REFER TO NEW WORK PLAN.
10	EXISTING LAV CHASE WALL TO REMAIN, EXCEPT CUT & PATCH AS REQUIRED TO MAKE NEW FIXTURE CONNS TO CHASE MAINS. CAP ALL EX. W/V MAIN CONNS NOT REUSED IN NEW WORK. REFER TO NEW WORK PLAN.

ENLARGED TOILET PLUMBING NEW WORK PLAN
SCALE: 1/4" = 1'-0"

2
P100

ENLARGED TOILET PLUMBING DEMOLITION PLAN
SCALE: 1/4" = 1'-0"

1
P100

Project Title:

Bathroom Plumbing Repairs
Ledyard High School
24 Gallup Hill Road
Ledyard, Connecticut 06339



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ADDENDUM #1

7-1-15

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Scale:

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1. PROVIDE LONGITUDINAL AND LATERAL BRACING ON PILING 2 1/2" AND GREATER, GAS PIPING 1" I.D. AND GREATER AND PIPING IN BOILER AND MECHANICAL ROOMS 1 1/4" AND GREATER, WHERE SUSPENDED 12" OR MORE FROM SUPPORTING STRUCTURE.
2. PROVIDE SIMILAR BRACING ON ALL DUCTWORK WITH CROSS-SECTIONAL AREA OF 6 SF OR GREATER OR DIAMETER OF 28 IN. OR GREATER WHERE SUSPENDED 12" OR MORE FROM SUPPORTING STRUCTURE.
3. MAKE END CONNECTIONS TO EXISTING STRUCTURAL STEEL WITH 1/2" BOLTS OR TO CONCRETE DECK PER CONNECTION TO CONCRETE DETAIL ABOVE.



1. THE INTENT OF THESE CONTRACT DOCUMENTS IS FOR THE CONTRACTOR TO FURNISH AND INSTALL COMPLETE PLUMBING SYSTEMS. ALL SYSTEMS SHALL BE COMPLETED IN ALL RESPECTS. OPERATIONS, TESTED, ADJUSTED, APPROVED BY THE AUTHORITY HAVING JURISDICTION FOR BEING LEGAL, USE BY THE OWNER.
2. THE CONTRACTOR SHALL OBTAIN AND REVIEW ALL CONTRACT DOCUMENTS, INCLUDING PROJECT MANUAL, PLANS AND SPECIFICATIONS OF ALL TRADES BRANCHES, AND ALL SUPPLEMENTAL DOCUMENTS, INCLUDING PROJECT MANUAL AND PLANS, INCLUDING ALL EQUIPMENT SCHEDULES FOR INFORMATION. CONTRACTOR SHALL WALK THROUGH BUILDING PRIOR TO SUBMITTING BO.
3. ALL OF THE DESIGN DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY TO FORM A TOTAL DESIGN PACKAGE. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO OBTAIN AND REVIEW ALL DRAWINGS, INCLUDING TRADE CONTRACTOR IS RESPONSIBLE FOR VARIOUS PORTIONS OF THE WORK.
4. ALL WORK AND ACTION DESCRIBED AND DESCRIBED SHALL BE PERFORMED BY THE CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE.
5. THE PLUMBING CONTRACTOR SHALL VERIFY THESE DRAWINGS WITH EXISTING FIELD CONDITIONS AND SHALL ADJUST HIS FINAL INSTALLATIONS TO SUIT EXISTING INSTALLATIONS.
6. BAND ROLLS, TIE WIRE, METAL STRAPPING OR WIRE STRAPPING SHALL NOT BE PERMITTED TO SUPPORT PIPES OR EQUIPMENT.
7. PROVIDE SUPPORT BRACING FOR EQUIPMENT AND BUILDING SERVICES FOR SEISMIC RESTRAINT AS REQUIRED BY THE STATE OF CONNECTICUT BUILDING CODE.
8. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS.
9. ALL EQUIPMENT, MATERIALS AND RELATED SYSTEMS COMPONENTS SHALL BE NEW UNLESS SPECIFICALLY NOTED OTHERWISE.
10. REPAIR AND/OR REPLACE AT NO COST TO OWNER ALL EQUIPMENT AND MATERIALS DAMAGED DURING CONSTRUCTION.
11. THE DRAWINGS ARE DIAGNOSTIC AND INDICATE THE GENERAL LOCATION AND ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. THE CONTRACTOR SHALL COORDINATE EQUIPMENT LOCATIONS AND PIPE ROUTING WITH ALL OTHER TRADES BEFORE STARTING CONSTRUCTION. ANY MODIFICATIONS TO THE CONTRACT SHALL BE IN WRITING. NO INSTALLATION ARE TO BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.
12. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION AND MOUNTING HEIGHTS OF EQUIPMENT. COLORS SHALL BE COORDINATED WITH THE ARCHITECT. THE CONTRACTOR SHALL CLARIFY IF INFORMATION IS NOT CONTAINED IN THE DRAWINGS.
13. ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH THE APPLICABLE CODES IN THE ORDINANCES AND THE REGULATORY AGENCIES HAVING JURISDICTION.
14. ALL EQUIPMENT SHALL BE LOCATED IN ACCESSIBLE LOCATIONS. WHEN A PICE OF EQUIPMENT SHALL BE LOCATED ABOVE AN INACCESSIBLE CEILING OR WALL, THE EQUIPMENT SHALL BE LOCATED ABOVE A DOOR OR SHALL BE PROVIDED SUCH EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO CLEANOUTS, WATER HAMMER ARRESTORS AND VALVES. THESE SHALL BE COORDINATED WITH THE ARCHITECT.
15. WHEN CONFLICTS OCCUR BETWEEN THE DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. THE CONTRACTOR SHALL CHARGE PART OF THE COST THE LARGER QUALITY AND/OR MORE EXPENSIVE METHOD.
16. CONTRACTORS SHALL COORDINATE THEIR WORK WITH ALL OTHER UNFINISHED EQUIPMENT, INCLUDING REQUIRED SERVICE CONNECTIONS, RECOVERIES, ETC. BEFORE INSTALLATION.
17. CONTRACTORS SHALL PROVIDE ALL REQUIRED SLEEVES AND SEALS FOR PIPES OR CONDUITS PENETRATING WALLS OR FLOOR SLABS WITH FIVE STRIPPING SEALANT WHEN REQUIRED.
18. LOCATION AND SIZES OF ALL FLOOR WALL AND ROOF PENETRATIONS SHALL BE COORDINATED WITH ALL OTHER TRADES IN INVOLVED.
19. ALL OPENINGS THROUGH FIVE OTHER WALLS OR FLOORS SHALL BE SEALED TO ACHIEVE REQUIRED RATING.
20. FOR EACH EXISTING FLOOR DRAIN IN THE PROJECT AREA PROVIDE BACKSWEPT TYPE OTHER THAN CAST IRON. PROVIDE SUCCESSFUL TEST TO ADEQUATE PLUMBING TEST REPORT. PROVIDE SYSTEMS TEST RAPID OR EQUAL.
21. ALL PIPES SHALL GRADE TO LOW POINTS. PROVIDE SLOPE AND DRAIN VALVES THE BOTTOM OF ALL SEERS AND LOW POINTS.
22. UNIONS AND OR FLANGES SHALL BE INSTALLED AT EACH PICE OF EQUIPMENT, IN BYPASSSES AND IN LONG PIPES RUN 100 FEET OR MORE TO PERMIT LEAKAGE AND/OR REPAIRS WITHOUT THE NEED TO REMOVE THE ENTIRE PIPING.
23. PROVIDE ALL PLUMBING PARTS AND EQUIPMENT WITH ACCESSIBLE SLOPES.
24. INSTALL PIPES SO THAT ALL VALVES, STRAINERS, UNIONS, TRAPS, FLANGES AND OTHER APPURTENANCES REQUIRING ACCESS ARE ACCESSIBLE.
25. PROVIDE CLEANOUTS IN SANITARY AND STORM DRAINAGE SYSTEMS AT EACH OF RUNS, AT CHANGES IN DIRECTION, NEAR THE BASE OF STACKS, EVERY 50 FEET IN HORIZONTAL RUNS AND ELSEWHERE AS INDICATED ON THE DRAWINGS.
26. ALL CLEANOUTS SHALL BE BUILT UP OF PIPE FOR PIPE 6 INCHES AND SMALLER AND SHALL BE 6 INCHES FOR PIPE 8 INCHES AND LARGER.
27. WHEN SIMILAR METALS ARE JOINED TOGETHER, AN APPROVED DIELECTRIC FITTING SHALL BE USED. THE DIELECTRIC FITTING SHALL BE A LISTED ASSEMBLY.
28. RUN ALL SOLID WASTE AND VENT PIPING SHOW OR REQUIRED BY LOCAL CODES. PROVIDE SHOWN IN MINIMUM AND IN ACCORDANCE WITH STATE REQUIREMENTS. FOR CODES REQUIRE ADDITIONAL VENTING OR LARGER SIZES, PROVIDE AS REQUIRED.
29. MAKE ALL CONNECTIONS THROUGH TRAPS. EACH TRAP TO BE VENTED, EITHER BY SHORT TRAP OR INDIVIDUAL VENT AS REQUIRED, BUT NOT LESS THAN SHOWN, OR AS REQUIRED BY LOCAL CODE.
30. PROVIDE AND INSTALL WATER HAMMER ARRESTORS ON MAIN DOMESTIC WATER BRANCH MAINS IN REBUILT CHASES, SLEES AND LOCATE WATER HAMMER ARRESTORS PER ARRESTOR MANUFACTURERS SING LOCATION. LEAKAGE DRAIN FOR EACH WATER HAMMER ARRESTOR AND THE PRESENTMENT OF THE SPECIFIC PARTS SERVED BY EACH BRANCH MAIN.

PLUMBING FIXTURE SCHEDULE							SAN/ WASTE	VENT	COLD	HOT
FIXTURE NUMBER	DESCRIPTION	MANUFACTURER	MODEL NUMBER	NOTES						
WC	WALL-MOUNT FLUSH VALVE WATER CLOSET (128 GPF)	AMERICAN STANDARD APPROVED EQUAL BY: KOHLER DRAKE	ARWALL 128 GPF # 3391.001	WHITE 128 GPF WALL-MOUNT ELONGATED TOP SPUD OLSONITE #85 ELONGATED OPEN FRONT PLASTIC SEAT WITH CHECK HINGE PROVIDE SLOAN ROYAL #128 HIGH EFFICIENCY MANUAL DIAPHRAGM-TYPE SIPHON JET FLUSH VALVE WITH DUAL FILTERED RIED BYPASS PROVIDE FLOOR-MOUNTED FIXTURE SUPPORT BY WADE JOSAM OR JAY R SMITH.		4	2	1	—	
WC-H	ADA WALL-MOUNT FLUSH VALVE WATER CLOSET (128 GPF)	AMERICAN STANDARD APPROVED EQUAL BY: KOHLER DRAKE	ARWALL 128 GPF # 3391.001	ADA COMPLIANT WHITE 128 GPF WALL-MOUNT ELONGATED TOP SPUD OLSONITE #85 ELONGATED OPEN FRONT PLASTIC SEAT WITH CHECK HINGE PROVIDE SLOAN ROYAL #128 HIGH EFFICIENCY MANUAL DIAPHRAGM-TYPE SIPHON JET FLUSH VALVE WITH DUAL FILTERED RIED BYPASS PROVIDE FLOOR-MOUNTED FIXTURE SUPPORT BY WADE JOSAM OR JAY R SMITH. ADA INSTALLATIONS COORD LOCATIONS OF FLUSH VALVE COMPONENTS INCLUDING TRIMMING LENGTH OF VACUUM TUBE (A MINIMUM 6" VAC TUBE LENGTH MUST REMAIN PER IFC) TO AVOID CONFLICT WITH CT-MANDATED REAR GRAB BAR INSTALLATIONS. REFER TO ARCHT TOILET ELEV.		4	2	1	—	
LR	WALL-MOUNT HIGH-EFFICIENCY URINAL (0.25 GPF)	AMERICAN STANDARD APPROVED EQUAL BY: KOHLER DRAKE	WASH-BROOK FLOWISE # 6690.001	ADA-COMPLIANT WHITE 0.25 GPF VITREOUS CHINA WALL MOUNT PROVIDE SLOAN ROYAL #85-0.25 HIGH EFFICIENCY MANUAL FLUSH-COMETER WITH DUAL LINEAR FILTERED BYPASS DIAPHRAGM. PROVIDE FLOOR-MOUNTED WALL SUPPORT BY WADE JOSAM OR JAY R SMITH.		2	—	—	—	
LR-H	ADA WALL-MOUNT HIGH-EFFICIENCY URINAL (0.25 GPF)	AMERICAN STANDARD APPROVED EQUAL BY: KOHLER DRAKE	WASH-BROOK FLOWISE # 6690.001	ADA-COMPLIANT WHITE 0.25 GPF VITREOUS CHINA WALL MOUNT PROVIDE SLOAN ROYAL #85-0.25 HIGH EFFICIENCY MANUAL FLUSH-COMETER WITH DUAL LINEAR FILTERED BYPASS DIAPHRAGM. PROVIDE FLOOR-MOUNTED WALL SUPPORT BY WADE JOSAM OR JAY R SMITH.		2	—	#2	—	
L-L/H	LAVATORY, FURNISHED AND INSTALLED WITH COUNTER, REFER TO ARCHT. DRAWINGS AND PROJECT MANUAL. PROVIDE FIXTURE WATER SUPPLIES AND CONTROL-BE WASTE PIPING FITTINGS, INSULATION ON EXPOSED PIPE, ETC.	REFER TO ARCHT. DRAWINGS AND PROJECT MANUAL	REFER TO ARCHT. DRAWINGS AND PROJECT MANUAL	COUNTER-FURNISHED AND INSTALLED WITH COUNTER (1) CENTERED FAUCET HOLE PROVIDE CHICAGO FACETS MODEL #87-#2205-665PSHAS ADA O.S GPM SINGLE TEMPERATURE METERS PUSH HANDLE FAUCET CHICAGO FACETS MODEL 323CPGRD STRAINER N TAUPICE CHROME-PLATED BRASS TRAP W.C.G. CP BRASS ANGLE STOPS CP COPPER SUPPLIES PROVIDE CONCEALED AIR SUPPORT BY WADE JOSAM JAY R SMITH FOR EACH LAV GROUPING (GRS L AV BANK BOYS L AV BANK AND STAFF LAVS) PROVIDE CHICAGO FAUCETS MODEL 323CPGRD STRAINER N TAUPICE CHROME-PLATED BRASS TRAP W.C.G. CP BRASS ANGLE STOPS CP COPPER SUPPLIES PROVIDE CONCEALED AIR IN CHASE BEHIND LOCKING ACCESS DOOR DISTRIBUTE TEMPERATURE WATER IN CHASE TO SERVE LAVS PENETRATING CHASE WALL BELOW EACH LAV WITH INDIVIDUAL LAV SERVICE WITH LOOSE KEY ANGLE STOP INSULATE ALL EXPOSED WATER/WASTE PIPING BELOW EACH LAV DESIGNATED LH-W/ ASTM E 84 COMPLIANT PRE-FORMED PIPE INSULATION KIT.		—	—	—	TEMPERED HW	
L-L/H	ADA WALL-MOUNT LAVATORY	AMERICAN STANDARD APPROVED EQUAL BY: KOHLER DRAKE	LUCERNE # 0XXXXXX	WALL-MOUNT ADA WHITE VITREOUS CHINA FOR CONCEALED ARMS 20.5 X 18.25 O.A. FRONT OVERFLOW SELF-DRAINING DECK AREA BACK/SIDE SPLASH SHIELDS FAUCET LEDGE (1) CENTERED FAUCET HOLE FAUCET PROVIDE ADA O.S GPM SINGLE TEMPERATURE METERS PUSH HANDLE FAUCET CHICAGO FACETS MODEL 323CPGRD STRAINER N TAUPICE CHROME-PLATED BRASS TRAP W.C.G. CP BRASS ANGLE STOPS CP COPPER SUPPLIES PROVIDE CONCEALED AIR SUPPORT BY WADE JOSAM JAY R SMITH FOR STAFF LAV GROUPING PROVIDE CHICAGO FAUCETS MODEL 323CPGRD STRAINER N TAUPICE CHROME-PLATED BRASS TRAP W.C.G. CP BRASS ANGLE STOPS CP COPPER SUPPLIES PROVIDE CONCEALED AIR IN CHASE BEHIND LOCKING ACCESS DOOR DISTRIBUTE TEMPERATURE WATER IN CHASE TO SERVE LAVS PENETRATING CHASE WALL BELOW EACH LAV WITH INDIVIDUAL LAV SERVICE WITH LOOSE KEY ANGLE STOP INSULATE ALL EXPOSED WATER/WASTE PIPING BELOW EACH LAV WITH ASTM E 84 COMPLIANT PRE-FORMED PIPE INSULATION KIT.		—	—	—	TEMPERED HW	
HB	HOT/COLD WASH-DOWN NOSE BIBB	WOODFORD MANUFACTURING APPROVED EQUAL BY: SUN-AISON ENGINEERING	C22CC	CHROME-PLATED COMMERCIAL HOT/COLD MIXING WALL FAUCET CLOSE-COUPLED INLET ARRANGEMENT WITH ASSE 1052-APPROVED BACKFLOW PREVENTER NO LEAD SOLDER SPOY PACKING PROVIDE VERTICAL HANDLES AND CLOSURES NOT OPERATED BY FACILITIES MANAGER EITHER INSTANT HANDLES OR TURN OVER FOR STORAGE		—	—	—	—	

NOTES:

- EACH LAVATORY & WATER COOLER WATER SUPPLY SHALL BE BRASS W/BRASS ANGLE STOP W/LOOSE KEY CAP AND WALL RANGE FOR 3/4" WATER SUPPLY LINE. ALL COMPONENTS SHALL BE POLISHED CHROME FINISH.
- EACH LAVATORY & WATER COOLER WASTE SHALL HAVE CAST BODY "P" TRAP 1/2" x 1/2" WITH HEAVY CAST J-BEND & FLAT CLEANOUT PLUG SLIP NUTS AND WALL FLANGE. ALL COMPONENTS SHALL BE POLISHED CHROME FINISH.
- STRAINER DRAINS SHALL BE FURNISHED WITH FIXTURES AS REQUIRED FOR HVAC LAVATORY AND SINKS. PROVIDE OFFSET TALPICE.
- PROVIDE IPS TRIEBUSO LAV-SHIELD ENCLOSURE FOR ALL WALL-MOUNT LAVATORIES TO CONCEAL WATER SUPPLIES & WASTE LINE BELOW LAVATORY.
- THE PLUMBING FIXTURE VENDOR SHALL COORDINATE ROUGH-IN DIMENSIONS FOR ALL PLUMBING FIXTURES WITH THE PLUMBING AND GENERAL CONTRACTORS BEFORE CONSTRUCTION BEGINS.
- UNLESS SPECIFIED ABOVE, THE MANUFACTURER COLOR AND FINISH FOR ALL PLUMBING FIXTURES AND TRIM SHALL BE PROVIDED AS DIRECTED BY OWNER/ARCHITECT.
- REFER TO ARCHITECTURAL DRAWINGS FOR STANDARD AND ADA FIXTURE MOUNTING HEIGHTS.
- CONTRACTOR SHALL PROVIDE AN EXTRA OR (BUT NOT LESS THAN 2 COMPLETE REPLACEMENT SETS) OF BATTERIES, AERATORS, CARTRIDGES, ETC.



Bathroom Plumbing Repairs
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Drawing Title:

SCHEDULES, NOTES AND DETAILS

Date: _____

FEBRUARY 29, 2016

Scale:

AS NOTED

Drawn By:

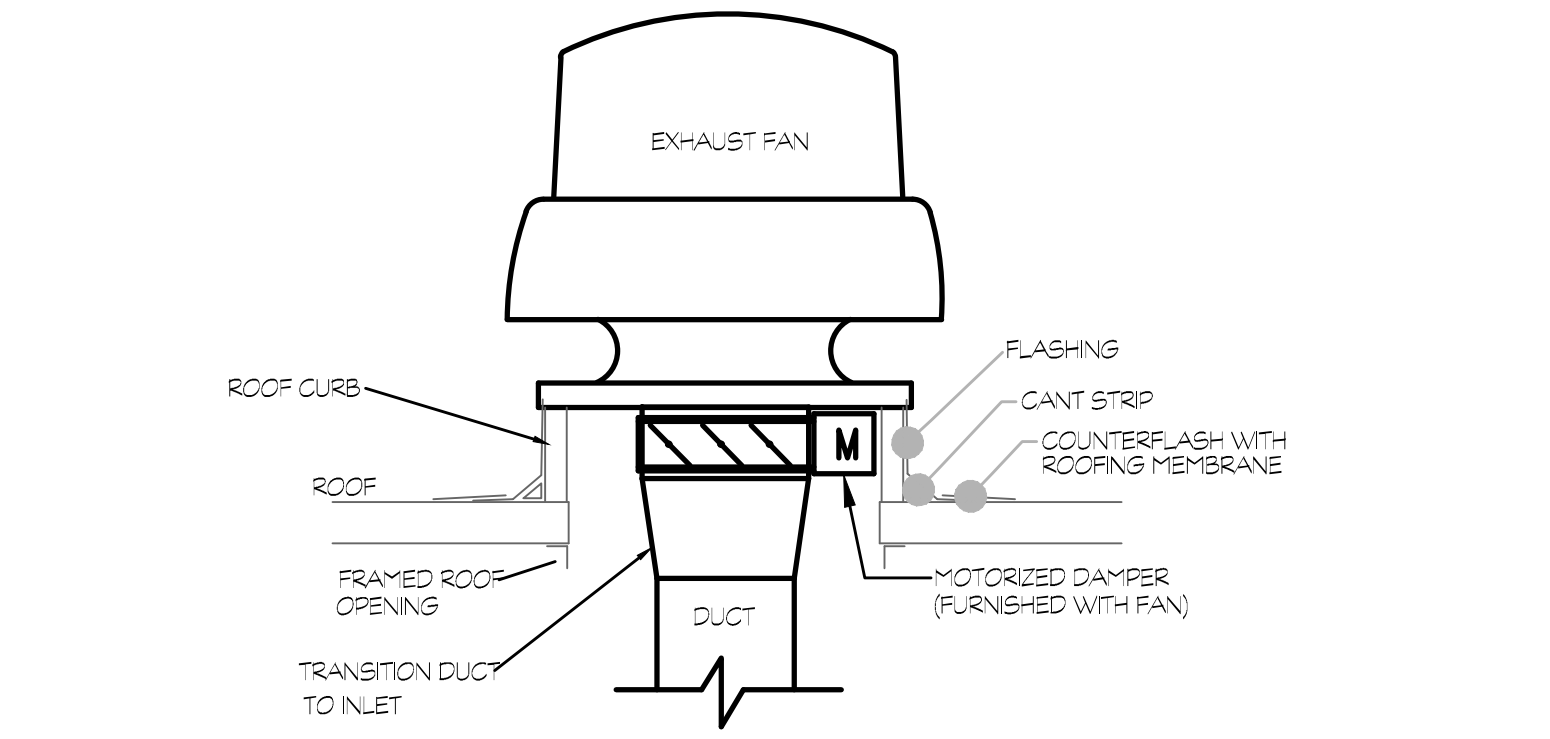
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Project Number:
15.139

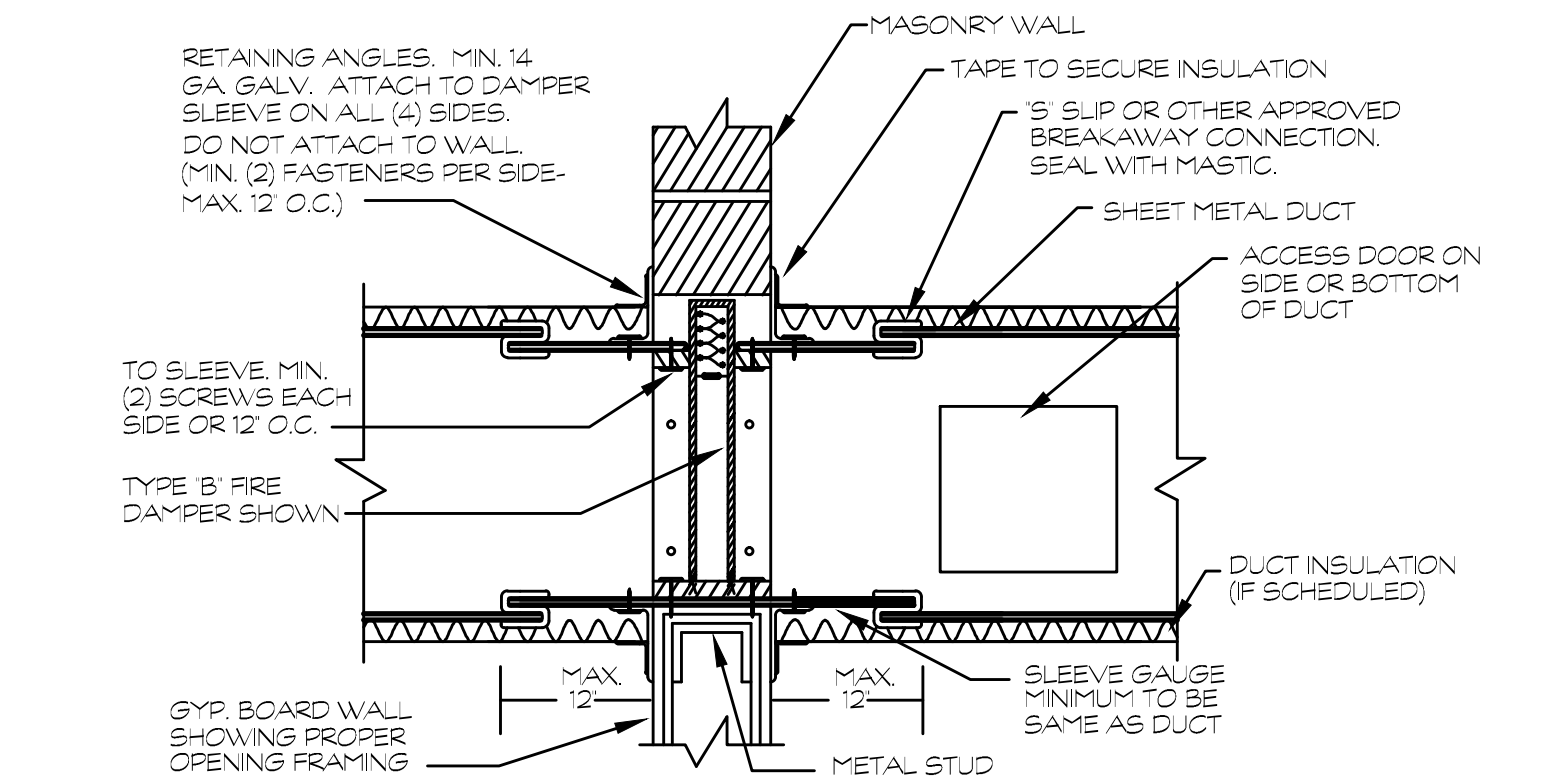
Drawing Number:

P200

MECHANICAL SYMBOLS/ABBREVIATIONS LEGEND			
(NOT ALL SYMBOLS/ABBREVIATIONS ARE USED)			
ABV	ABOVE	——	EXISTING MECHANICAL ITEM TO REMAIN
AF	ABOVE FINISHED FLOOR	-----	EXISTING MECHANICAL ITEM TO BE REMOVED
BLW	BELOW	——	NEW MECHANICAL ITEM
CFM	CUBIC FEET PER MINUTE	---	NEW MECHANICAL ITEM (ROOM-MOUNTED)
CLG	CEILING	①	MECHANICAL DEMOLITION NOTE (REFERENCE NUMBER INDICATES NOTE)
DIA. OR Ø	DIAMETER	①	MECHANICAL NEW WORK NOTE (REFERENCE NUMBER INDICATES NOTE)
E.S.P.	EXTERNAL STATIC PRESSURE	→→	DOOR UNDERCUT BY OTHER DIVISIONS
EXH	EXHAUST		WALL RETURN OR EXHAUST GRILLE
FLR	FLOOR	—○—	PIPE TEE, OUTLET UP OR PIPE RISER, UP/DN
GALV.	GALVANIZED	▣	EXHAUST DUCT UP OR CLG TRANSFER GRILLE
HP	HORSEPOWER	▣	EXHAUST DUCT DOWN
HWS	(HEATING) HOT WATER SUPPLY	()	FLEXIBLE DUCT CONNECTION, SINGLE LINE DUCTWORK
HWR	(HEATING) HOT WATER RETURN	→	RECTANGULAR TO ROUND TRANSITION
O.W.	OPEN WEB	▷	TRANSITION
RPM	REVOLUTIONS PER MINUTE	→→	DUCT WORK, DIRECTION OF FLOW
REQD	REQUIRED	▣	NEGATIVE PRESSURE DUCT
		⋈	POINT OF CONNECTION
		→	DIRECTION OF TRANSFER OR EXHAUST AIR
		FD/AD	FIRE DAMPER W/ ACCESS DOOR



ROOF EXHAUST FAN DETAIL
NOT TO SCALE



- GENERAL NOTES:**

 - THIS DETAIL IS FOR GUIDANCE ONLY. IN ALL CASES FIRE DAMPERS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF ALL CODES AND WITH THE INSTALLATION INSTRUCTIONS OF THE DAMPER MANUFACTURER.
 - INSTALLATION INSTRUCTIONS SHALL BE SUBMITTED WITH FIRE/SMOKE DAMPER SHOP DRAWINGS.
 - PROVIDE TDC, TDF FOR OTHER APPROVED FLANGED JOINT BREAKAWAY CONNECTION AS REQUIRED BY DUCT SIZE AND PRESSURE CLASS.
 - SEE SMACNA MANUAL, FIRE, SMOKE AND RADIATION DAMPER INSTALLATION GUIDE FOR HVAC SYSTEMS FOR GUIDANCE.
- INSTALLATION NOTES:**

 - PROVIDE MIN. 1/8" CLEARANCE PER FOOT OF DAMPER LENGTH AND DAMPER WIDTH TO WALL ALL AROUND DAMPER FOR THERMAL EXPANSION.
 - HORIZONTAL INSTALLATION SIMILAR EXCEPT USE SPRINGS ACTUATED DAMPER.
 - DETAIL SHOWS CONNECTION METHOD FOR SHEET METAL DUCT WORK IN EITHER GYPSUM OR BLOCK WALL PENETRATION.
 - A MAXIMUM OF TWO NO. 10 SCREWS ARE ALLOWED IN 1/2\"/>

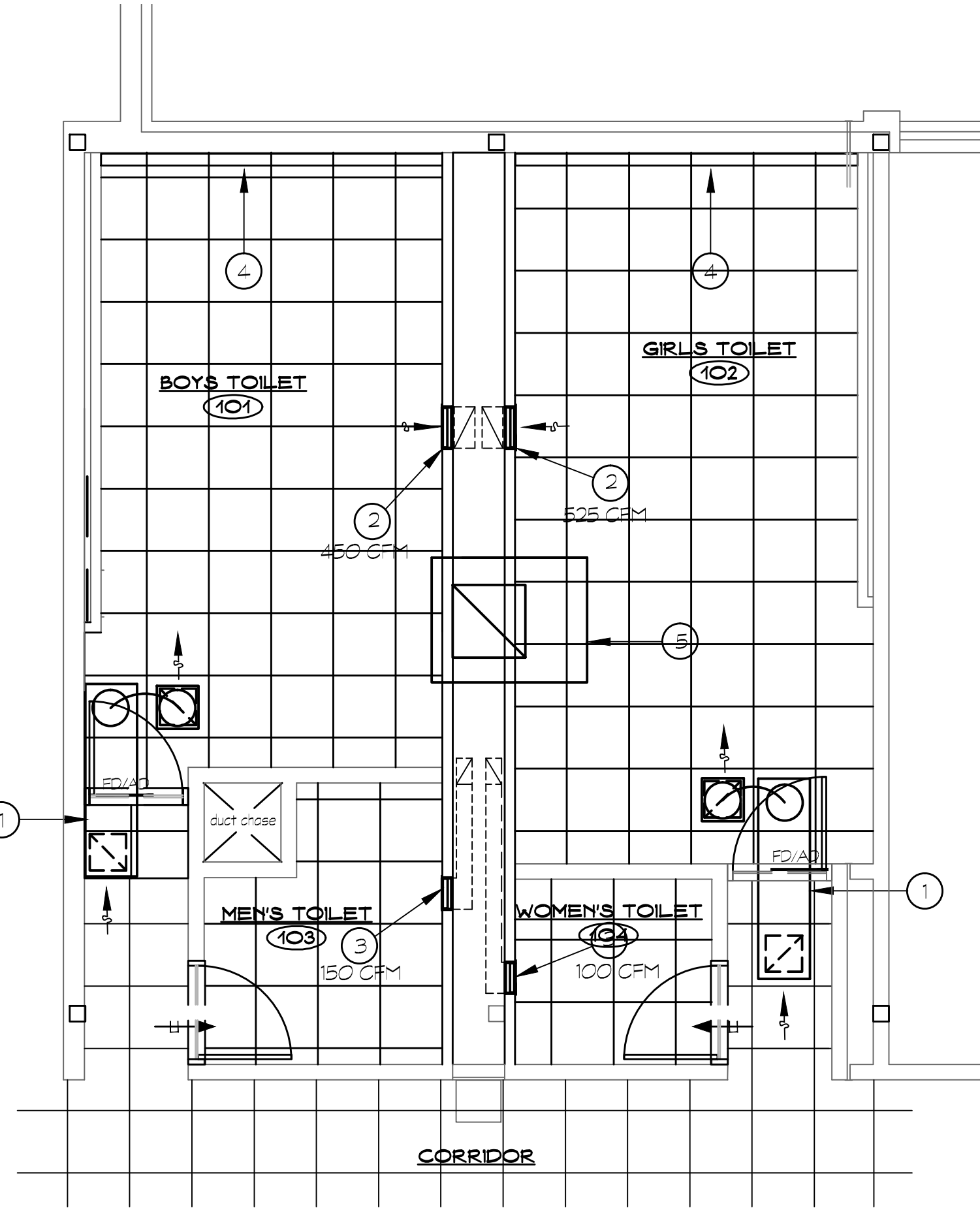
FIRE/SMOKE DAMPER INSTALLATION DETAIL
NOT TO SCALE

GENERAL

- THE INTENT OF THESE CONTRACT DOCUMENTS IS FOR THE CONTRACTOR TO FURNISH AND INSTALL COMPLETE MECHANICAL AND ELECTRICAL SYSTEMS. THESE MECHANICAL AND ELECTRICAL SYSTEMS INCLUDE PLUMBING, FIRE PROTECTION, HVAC, ELECTRICAL AND ALL ASSOCIATED SPECIAL SYSTEMS. ALL SYSTEMS SHALL BE COMPLETE IN ALL RESPECTS, OPERATING, TESTED, ADJUSTED, APPROVED BY THE AUTHORITIES HAVING JURISDICTION AND READY FOR BENEFICIAL USE BY THE OWNER.
- THE CONTRACTOR SHALL OBTAIN AND REVIEW ALL CONTRACT DOCUMENTS, INCLUDING PROJECT MANUAL, PLANS AND SPECIFICATIONS OF ALL TRADES BEFORE SUBMITTING BID. REFER TO SPECIFICATIONS, PROJECT MANUAL AND PLANS INCLUDING ALL EQUIPMENT SCHEDULES FOR MECHANICAL AND ELECTRICAL INFORMATION. CONTRACTOR SHALL WALK THROUGH BUILDING PRIOR TO SUBMITTING BID.
- ALL OF THE CONTRACT DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY TO FORM A TOTAL DESIGN PACKAGE. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER TO DETERMINE WHICH TRADE CONTRACTOR IS RESPONSIBLE FOR VARIOUS PORTIONS OF THE WORK.
- ALL WORK AND ACTION DEPICTED AND DESCRIBED SHALL BE PERFORMED BY THE CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE.
- PROVIDE SUPPORT/BRACING OF EQUIPMENT AND BUILDING SERVICES FOR SEISMIC RESTRAINT AS REQUIRED BY CODE.
- OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS.
- ALL EQUIPMENT, MATERIALS AND RELATED SYSTEMS COMPONENTS SHALL BE NEW UNLESS SPECIFICALLY NOTED OTHERWISE.
- REPAIR AND/OR REPLACE AT NO COST TO OWNER ALL EQUIPMENT AND MATERIALS DAMAGED DURING CONSTRUCTION.
- THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL LOCATION AND ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. THE CONTRACTOR SHALL COORDINATE LOCATIONS OF EQUIPMENT WITH ALL TRADES BEFORE STARTING CONSTRUCTION. ANY MODIFICATIONS TO THE EQUIPMENT LAYOUT REQUIRED FOR INSTALLATION ARE TO BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.
- REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION OF LIGHT FIXTURES AND MOUNTING HEIGHTS OF EQUIPMENT, INCLUSIVE OF RECEPTACLES, SWITCHES, THERMOSTATS, ETC. ALL SUCH EQUIPMENT AND COLORS SHALL BE COORDINATED WITH THE ARCHITECT. CONTACT ARCHITECT FOR CLARIFICATION OF MOUNTING REQUIREMENTS IF INFORMATION IS NOT CONTAINED IN THE DRAWINGS.
- ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH THE APPLICABLE CODES IN THE ORDINANCES AND THE REGULATORY AGENCIES HAVING JURISDICTION.
- ALL EQUIPMENT SHALL BE LOCATED IN ACCESSIBLE LOCATIONS. WHEN A PIECE OF EQUIPMENT MUST BE LOCATED ABOVE AN INACCESSIBLE CEILING OR WALL, THEN THE APPROPRIATE ACCESS DOOR SHALL BE PROVIDED. THESE SHALL BE COORDINATED WITH THE ARCHITECT.
- WHEN CONFLICTS OCCUR BETWEEN THE DRAWINGS AND/OR SPECIFICATIONS IT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. THE CONTRACTOR SHALL CARRY AS PART OF THE BID THE LARGER QUANTITY AND/OR MORE EXPENSIVE ITEM(S).
- CONTRACTORS SHALL COORDINATE THEIR WORK WITH ALL OWNER-FURNISHED EQUIPMENT, INCLUDING REQUIRED SERVICE CONNECTIONS, RECEPTACLES, ETC. BEFORE INSTALLATION.
- CONTRACTORS SHALL PROVIDE ALL REQUIRED SLEEVES AND SEALS FOR PIPES OR CONDUIT PENETRATING WALLS OR FLOOR SLABS WITH FIRE STOPPING SEALANT WHERE REQUIRED.
- PROVIDE VIBRATION ISOLATION FOR ALL MECHANICAL EQUIPMENT.
- PROVIDE VIBRATION ISOLATORS FOR ALL PIPING SUPPORTS CONNECTED TO AND WITHIN 50 FEET OF ISOLATED EQUIPMENT THROUGHOUT MECHANICAL EQUIPMENT ROOMS.
- ALL EQUIPMENT, PIPING, DUCT WORK SHALL BE SUPPORTED AS DETAILED, SPECIFIED AND OR REQUIRED TO PROVIDE A VIBRATION FREE INSTALLATION.
- LOCATION AND SIZES OF ALL FLOOR, WALL AND ROOF PENETRATIONS SHALL BE COORDINATED WITH ALL OTHER TRADES INVOLVED.
- INSTALL COMPLETE OPERATING SYSTEMS. PROVIDE ALL COMPONENTS, DEVICES, CONTROLS, RELAYS, TRANSFORMERS, ETC., WHETHER INDICATED OR NOT, FOR COMPLETE SYSTEMS AS INTENDED BY THE CONSTRUCTION DOCUMENTS.
- ALL NEW EQUIPMENT SPECIFIED SHALL BE CONNECTED TO THE EXISTING BUILDING AUTOMATION SYSTEM (BAS).
- IF THE BUILDING IS TO BE OCCUPIED DURING CONSTRUCTION, MAINTAIN EXISTING SERVICES TO OCCUPIED AREAS. SEAL ALL DUCTWORK AND VENTILATION OPENINGS COMMUNICATING CONSTRUCTION AREAS WITH OCCUPIED AREAS TO PREVENT THE TRANSFER OF AIR CONTAMINATED BY CONSTRUCTION ACTIVITIES.
- ALL PENETRATIONS THRU RATED WALLS, FLOORS & CEILINGS SHALL BE SEALED USING U.L. LISTED METHODS APPROPRIATE FOR INDICATED RATINGS.

HVAC

- PIPING AND DUCT WORK LAYOUTS AS INDICATED ON THE DRAWINGS ARE DIAGRAMMATIC. PROVIDE ADDITIONAL TRANSITIONS AND OFFSETS AS REQUIRED FOR COORDINATION WITH BUILDING CONSTRUCTION AND THE WORK OF OTHER TRADES.
- FLEX DUCT RUNS SHALL NOT BE LONGER THAN 5 FT.
- PROVIDE VOLUME DAMPERS AT ALL EXHAUST GRILLES.
- COORDINATE DIFFUSER, REGISTER AND GRILLE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS, LIGHTING AND OTHER CEILING ITEMS.
- ALL DUCTWORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN DUCTS INCLUDING DIVIDED DUCTS AND TRANSITIONS AROUND OBSTRUCTIONS, SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- ALL DUCTWORK SHALL BE SHEET METAL AND TO SMACNA STANDARDS. ALL NEW DUCTWORK CONNECTING TO EXISTING SHALL MATCH EXISTING DUCT MATERIAL.
- TRANSITION NEW DUCTS AT CONNECTIONS TO AIR INLETS/OUTLETS TO MATCH CONNECTION SIZES.
- PRIOR TO THE START OF ANY MECHANICAL WORK, CONTRACTOR SHALL (1) INSPECT EXISTING EXHAUST FAN EF-2 WHICH SERVES THE PROJECT TOILET ROOMS AND REPORT TO OWNER AND ARCHITECT ON PHYSICAL CONDITION AND OPERATION, AND TYPE /LOCATION OF EXISTING CONTROLS; AND (2) TAKE PRELIMINARY READINGS ON THE EXISTING EF-2 SYSTEM AIR INLETS AND PROVIDE CFM VALUES IN A REPORT TO THE OWNER. AFTER COMPLETION OF MECHANICAL WORK, CONTRACTOR SHALL PROVIDE TESTING AND BALANCING SERVICES FOR THE ENTIRE REVISED EF-2 SYSTEM. 1ST FLOOR AIR INLETS SHALL BE BALANCED TO 100% OF THE CFM VALUES NOTED ON THE PLAN. EACH 2ND FLOOR AIR INLET SHALL BE BALANCED TO 75 TO 100 CFM. FOR EACH TOILET URINAL IN THE AREA THE INLET SERVES, VERIFY EXACT NUMBER OF FIXTURES IN FIELD. PROVIDE OWNER WITH COMPLETE AND SIGNED REPORT. CONTRACTOR SHALL PROVIDE ALL GAUGES, INSTRUMENTS, TOOLS, ETC., AS REQUIRED TO BALANCE THE EF-2 EXHAUST AIR SYSTEM.



NEW WORK PLAN KEY NOTES

- GENERAL:**
- REFER TO ARCHITECTURAL DRAWINGS FOR EXACT EXTENT OF NEW WORK.
- ALL DIFFUSER/REGISTER/GRILLE SIZES REFERENCED ARE CORE/NECK DIMENSIONS, UNLESS OTHERWISE NOTED.
- DUCT SIZES REFERENCED ARE CLEAR INSIDE DIMENSIONS.
- PROVIDE NEW 20" X 15" GALV. STEEL TRANSFER DUCT TIGHT AS POSSIBLE TO CEILINGS, WITH FIRE DAMPER AT WALL. PROVIDE 14" X 14" EGGSHELL GRILLES IN CORRIDOR AND TOILET ROOM CEILINGS. PROVIDE GALV. STEEL PLENUM ON TRANSFER GRILLE IN TOILET ROOM CEILING AND 14" Ø FLEX FROM SHEET METAL TRANSFER DUCT THRU O.W. JOISTS TO PLENUM.
 - PROVIDE NEW 18" X 8" EXHAUST REGISTER HIGH ON NEW CHASE WALL AND CONNECT TO EXISTING 18" X 8" EXHAUST RISER IN CHASE.
 - UNDER BASE BID, PROVIDE NEW 12" X 6" EXHAUST REGISTER HIGH ON NEW CHASE WALL AND CONNECT TO EXISTING 10" X 6" EXHAUST RISER IN CHASE. UNDER STAFF RE RENOVATION DELIGHT, ALTERNATE, DELETE NEW WORK PLAN KEY NOTE 3.
 - REMOVE EXISTING FINNED TUBE RADIATION ENCLOSURE. CLEAN, PREPARE FOR PAINTING, PAINT USING PRODUCTS SUITABLE FOR METAL SURFACES: (1) COAT OF RUST-INHIBITING PRIMER AND (2) COATS OF GLOSS FINISH PAINT, COLOR SELECTED BY ARCHITECT; REINSTALL ENCLOSURE, REPLACE ANY EXISTING MOUNTING HARDWARE WITH NEW STAINLESS STEEL HARDWARE.
 - PROVIDE NEW ROOF EXHAUST FAN REPLACEMENT (DESIGNATION EF-2) ON NEW ROOF CURB, WITH ALL NEW ACCESSORIES AND CONTROLS. REFER TO SPEC NOTE THIS SHEET.

NEW WORK SPEC NOTES

(ALSO REFER TO PROJECT MANUAL)

ROOF EXHAUST FAN EF-2 REPLACEMENT

(PER ORIGINAL FAN SCHEDULE (CA 1985) NEW FAN REPLACES PENN LINBA MODEL 30, BELT DRIVE, 120VOLTS/1 PHASE, 1/2 HP, EXHAUSTING 3800 CFM AT APPROX. 0.45 E.S.P. AND 1200 RPM. PROVIDE THE FOLLOWING MFRS OPTIONS: OPEN DRIP-PROOF MOTOR, THERMAL OVERLOAD PROTECTION, NEMA 3R DISCONNECT SWITCH WITH FACTORY NEMA 3R INTERNAL WIRING, 120V, MOTORIZED DAMPER INTERLOCKED WITH FAN OPERATION, BRD SCREEN, FABRICATED ALUMINUM UNISEAM ROOF CURB.

NEW ROOF EXHAUST FAN EF-2

PENN-BARRY LINBA MODEL LF30, LOW SILHOUETTE, ALUMINUM HOUSING, CENTRIFUGAL, BELT DRIVE, 120VOLTS/1 PHASE/60-HERTZ, 1/2 HP, RATED 3800 CFM AT APPROX. 0.45 E.S.P. AND 1200 RPM. PROVIDE THE FOLLOWING MFRS OPTIONS: OPEN DRIP-PROOF MOTOR, THERMAL OVERLOAD PROTECTION, NEMA 3R DISCONNECT SWITCH WITH FACTORY NEMA 3R INTERNAL WIRING, 120V, MOTORIZED DAMPER INTERLOCKED WITH FAN OPERATION, BRD SCREEN, FABRICATED ALUMINUM UNISEAM ROOF CURB.

MODIFY EXISTING ROOF OPENING IF/AS REQD TO ACCOMMODATE FAN REPLACEMENT. INSTALL NEW CURB ON ROOF WITH FLASHING AND COUNTER-FLASHING, USING MATERIALS COMPATIBLE WITH EXISTING ROOFING. INSTALLATION SHALL NOT VOID ROOF WARRANTY. INSTALL EXHAUST FAN ON CURB IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS. REFER TO DETAIL FOR GENERAL REQUIREMENTS.

TIE NEW EXHAUST FAN INTO EXISTING BUILDING AUTOMATION SYSTEM; FAN SHALL RUN DURING SCHEDULED OCCUPED PERIODS ONLY.

TRANSFER GRILLES
PRICE MODEL 82.1 X 11 X 1" ALUMINUM BRD CORE EXTRUDED ALUMINUM SURFACE-MOUNT FRAME WITH 1/2" WIDE BORDER, COUNTERSUNK SCREW HOLES-SCREWS, WHITE POWDER COAT FINISH.

EXHAUST REGISTERS

PRICE MODEL 830 DAL, LOVERSED FACE, DOUBLE DEFLECTION WITH 1/2" BLADE SPACING, 45° DEFLECTION, ALUMINUM DAMPER, EXTRUDED ALUMINUM SURFACE-MOUNT FRAME WITH 1/2" WIDE BORDER, COUNTERSUNK SCREW HOLES-SCREWS, WHITE POWDER COAT FINISH.

DEMOLITION PLAN KEY NOTES

GENERAL:

REFER TO ARCHITECTURAL DRAWINGS FOR EXACT EXTENT OF DEMOLITION WORK.

NOTE: ALL DIFFUSER/REGISTER/GRILLE SIZES REFERENCED ARE CORE/NECK DIMENSIONS, UNLESS OTHERWISE NOTED.

- REMOVE EXISTING APPROXIMATELY 12" X 24" TRANSFER GRILLE TO CHASE. REFER TO NEW WORK PLAN.
- REMOVE EXISTING APPROXIMATELY 10" X 20" TRANSFER GRILLE FROM CHASE. REFER TO NEW WORK PLAN.
- REMOVE EXISTING APPROXIMATELY 10" X 20" TRANSFER GRILLE FROM CHASE. REFER TO NEW WORK PLAN.
- REMOVE EXISTING APPROXIMATELY 18" X 8" EXHAUST REGISTER (HIGH). REMOVE & REINSTALL RELATED DUCTWORK AS REQUIRED TO DEMOLISH EXISTING AND BUILD NEW CHASE. UNDER STAFF RE RENOVATION DELIGHT, ALTERNATE, DELETE DEMOLITION PLAN KEY NOTE 5.
- UNDER BASE BID, REMOVE EXISTING APPROXIMATELY 12" X 6" EXHAUST REGISTER (HIGH). REMOVE & REINSTALL RELATED DUCTWORK AS REQUIRED TO DEMOLISH EXISTING AND BUILD NEW CHASE. UNDER STAFF RE RENOVATION DELIGHT, ALTERNATE, DELETE DEMOLITION PLAN KEY NOTE 5.
- RETAIN EXISTING FINNED TUBE RADIATION WITH WALL-TO-WALL ENCLOSURE, MOUNTED HIGH ON WALL. ENCLOSURE DIMENSIONS: APPROXIMATELY 44" DEEP X 14" HIGH. TO REMAIN. REFER TO NEW WORK PLAN.
- RETAIN EXISTING HWS/HWR RISERS IN CHASE AND BRANCHES FEEDING TOILET ROOM RADIATION.
- APPROXIMATE LOCATION OF EXISTING ROOF EXHAUST FAN EF-2 WHICH SERVES PROJECT 1ST FLOOR TOILET ROOMS AND 2ND FLOOR TOILET ROOMS DIRECTLY ABOVE. REMOVE EXHAUST FAN, CONTROLS AND ROOF CURB.

ENLARGED TOILET MECHANICAL NEW WORK PLAN

SCALE: 1/4" = 1'-0"

2
M100

ENLARGED TOILET MECHANICAL DEMOLITION PLAN

SCALE: 1/4" = 1'-0"

1
M100

Project Title:

Bathroom Plumbing Repairs
Ledyard High School
24 Gallup Hill Road
Ledyard, Connecticut 06339



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Revision: Description:

Date:

Revised By:

Drawing Title:

Date:

FEBRUARY 29, 2016

Scale:

AS NOTED

Drawn By:

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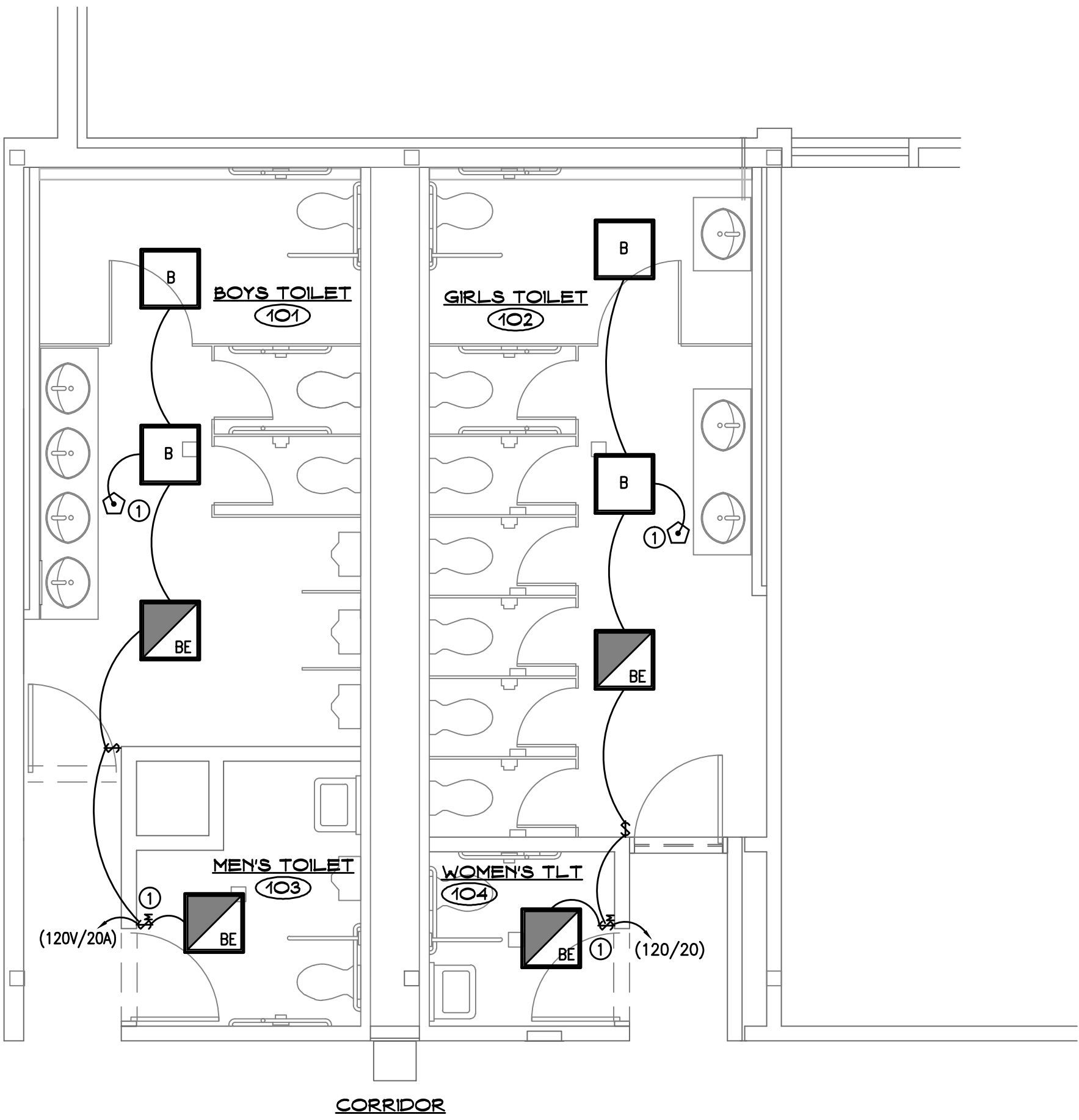
Project Number:

16.139

Drawing Number:

**MECHANICAL PLANS,
NOTES, LEGENDS,
AND DETAILS**

M100



FIRST FLOOR LIGHTING PLAN
SCALE: 1/4" = 1'-0"

1
E1

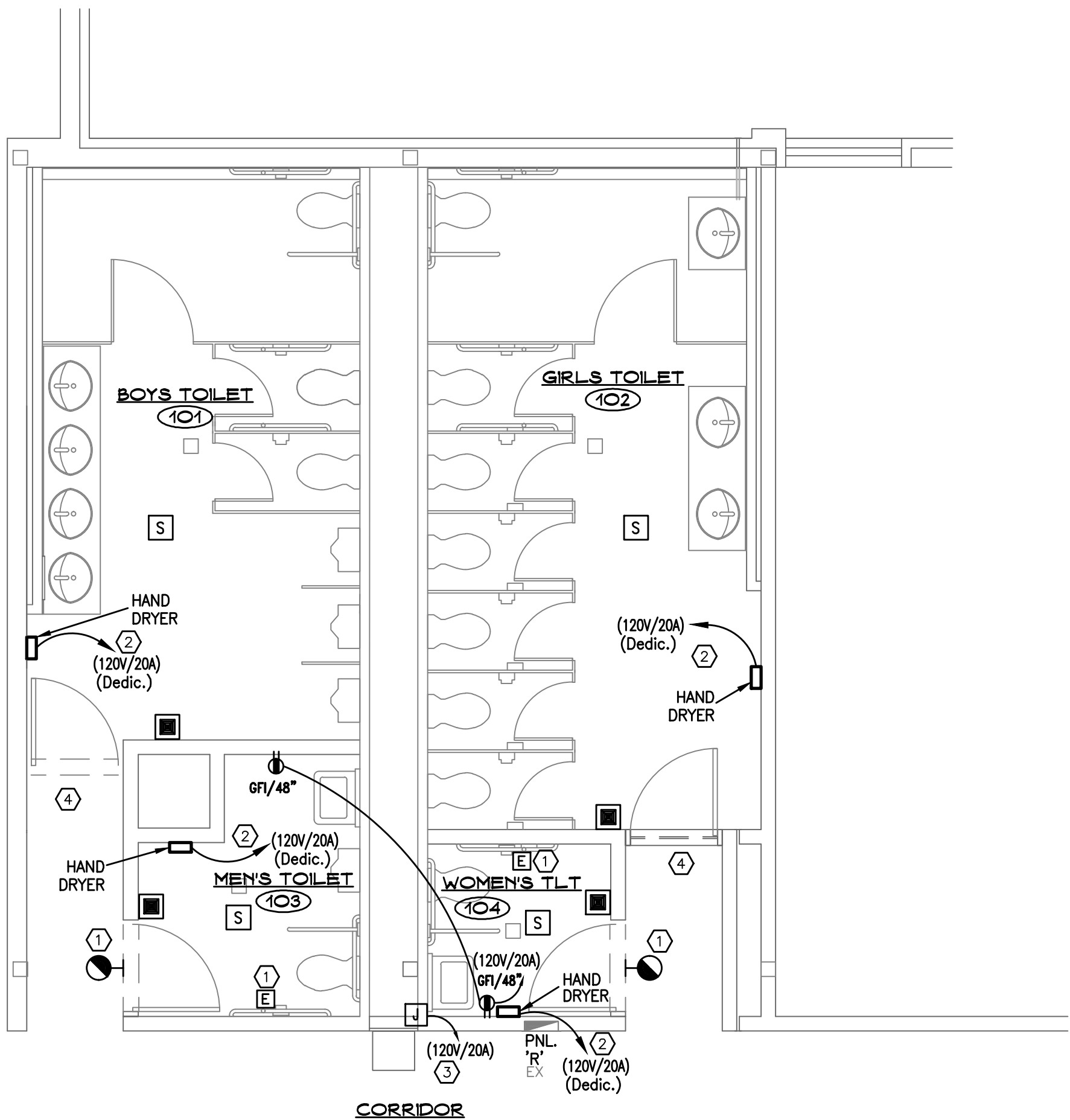
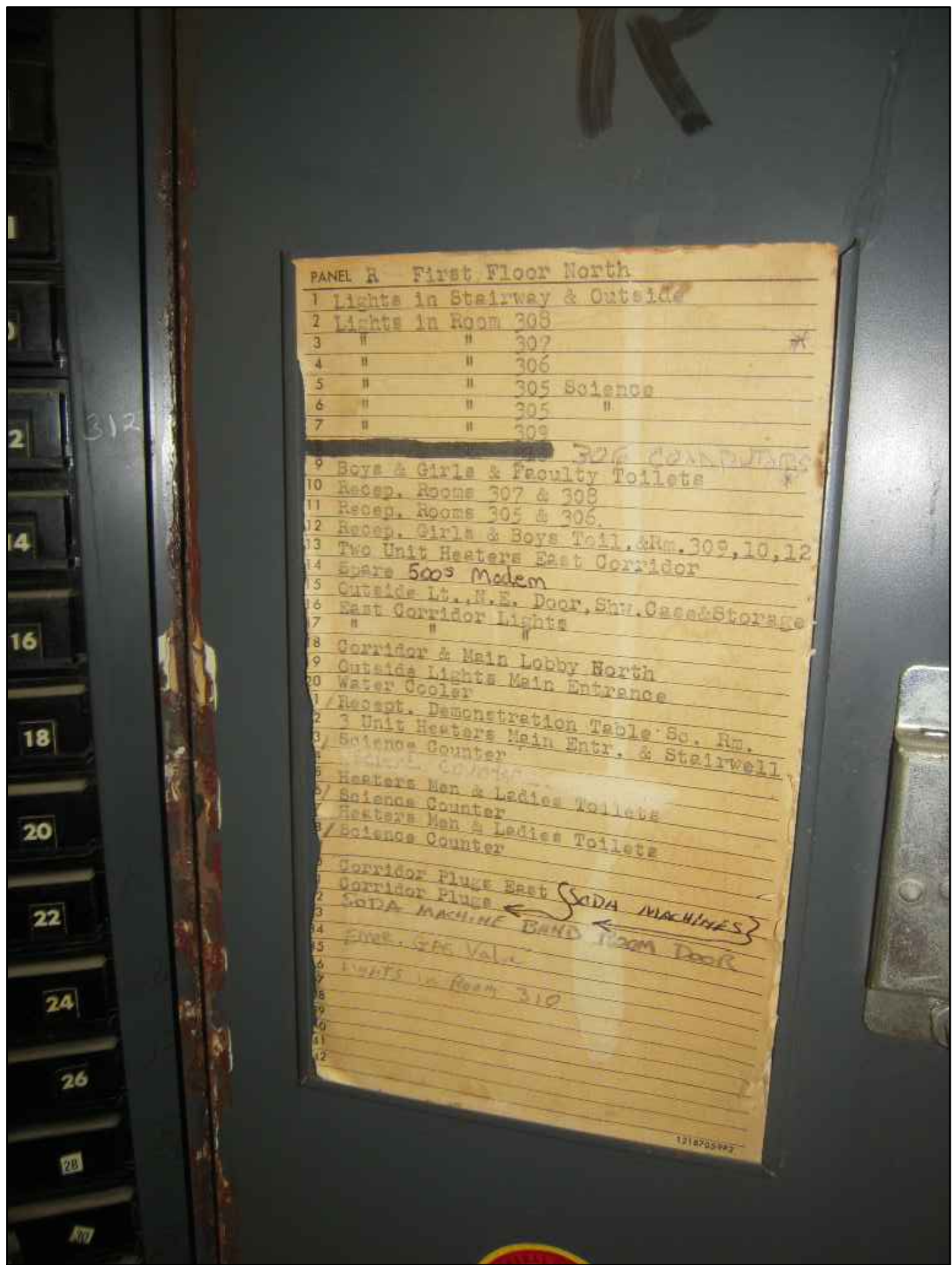
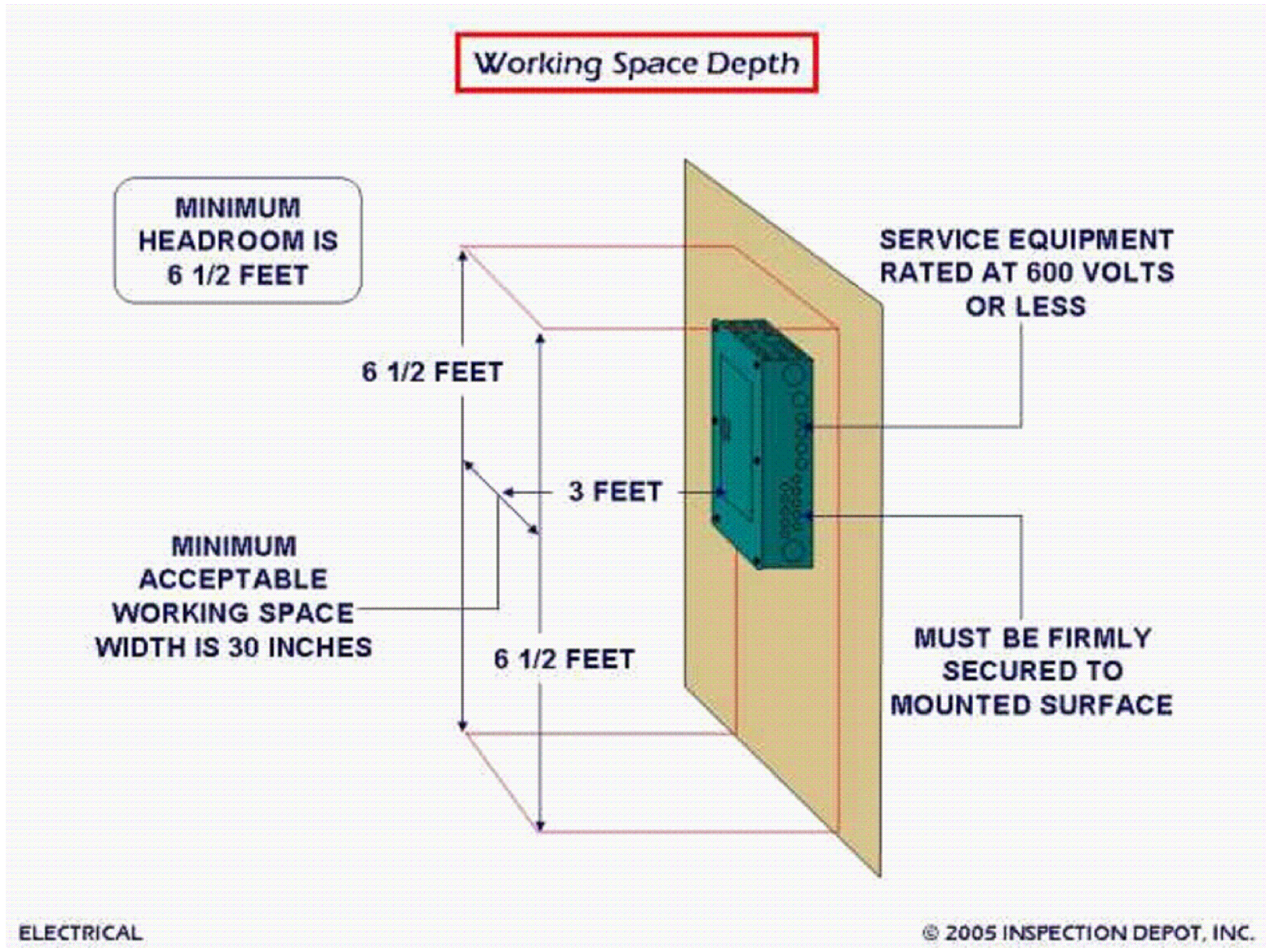
PLAN LIGHTING NOTES

① PROVIDE MOTION DETECTOR SWITCH TO OPERATE LIGHT FIXTURE(S) WITHIN THE INTENDED ROOM. COORDINATE WITH OWNER FOR LENGTH OF TIME DELAY SETTING. SEE DETAILS ON DRAWING "E3".

- IMPORTANT NOTES**
- ALL LIGHTING FIXTURE BRANCH CIRCUITS SHALL BE CONNECTED TO THE EXISTING LIGHTING CIRCUITS.
- DEDUCT ALTERNATE 1:**
- THIS ALTERNATE REMOVES ALL ELECTRICAL WORK IN MEN'S TOILET 103 AND WOMEN'S TOILET 104.



Revision:	Description:	Date:	Revised By:



FIRST FLOOR POWER PLAN
SCALE: 1/4" = 1'-0"

POWER PLAN NOTES

- PROVIDE NEW HANDICAP CALL-FOR-AID SYSTEM. WIRE TO ROOM RECEPTACLE BRANCH CIRCUIT.
USE: 'AUTHENTIC PARTS' #302-2C/#206-2 OR EQUAL
- PROVIDE 120V/20A JUNCTION BOX, WIRE AND CONDUIT FOR WALL MOUNTED NEW COMMERCIAL HAND DRYER (ALTERNATE).
- PROVIDE WIRES, CONDUIT AND J-BOX INSIDE CHASE, ABOVE WATER COOLER, TO POWER ROOF TOP EXHAUST FAN (120V/1PH, 1/2 HP). COORDINATE DETAILS WITH DEVICES IN FIELD.
- PROVIDE DUCT SMOKE DETECTOR FOR INSTALLATION BY HVAC CONTRACTOR. DETECTOR SHALL BE LISTED FOR OPERATION WITH EXISTING BUILDING FIRE ALARM SYSTEM. FURNISH DETECTOR WITH AUXILIARY RELAYS AND WIRE FOR CLOSURE OF DAMPER ON DETECTION OF SMOKE. CONNECT DETECTOR TO EXISTING ADDRESSABLE INITIATING LOOP AND TO LOCAL 120V RECEPTACLE CIRCUIT FOR POWER.

IMPORTANT NOTES

- ALL RECEPTACLE BRANCH CIRCUITS SHALL BE CONNECTED TO THE EXISTING RECEPTACLE CIRCUITS.
- FIRE ALARM DEVICES TO MATCH BUILDING EXISTING. PROVIDE WIRES TO EXISTING FACP. ALL WIRING TO BE PER SPECIFICATIONS AND MANUFACTURER'S REQUIREMENTS.
- REFER TO THESE POWER PLANS TO CONFIRM DEVICE QUANTITIES.
- COORDINATE FINAL TEST WITH FIRE MARSHAL.

DEDUCT ALTERNATE 1:

- THIS ALTERNATE REMOVES ALL ELECTRICAL WORK IN MEN'S TOILET 103 AND WOMEN'S TOILET 104.

DEDUCT ALTERNATE 2:

- THIS ALTERNATE REMOVES BRANCH CIRCUIT WIRING TO EACH OF FOUR (4) HAND DRYER LOCATIONS FROM THE NEW JANITORIAL CLOSET PANELBOARD 'R1' AS WELL AS PROVISION OF THE NEW PANELBOARD 'R1'.

PANELBOARD:

- PROVIDE A NEW SURFACE MOUNT, 120/208V, 3PH, 4WIRES, 50AMPS, 16 CIRCUITS, RATED 22KAIC PANELBOARD 'R1', IN THE CLOSE VICINITY ROOM, JANITORIAL CLOSET 013. COORDINATE EXACT LOCATION IN FIELD. PANEL SHALL HAVE 3 FEET CLEARANCE IN THE FRONT - SEE THE DETAILS IN THIS DRAWING. CONTRACTOR TO PROVIDE BLACK PAINTED PLYWOOD BACKBOARD, ANCHOR AS REQUIRED FOR SEISMIC LOAD. LABEL THE PANEL OUTSIDE DOOR AND INSIDE CIRCUIT BREAKERS.
- HOW TO PROCEED: RELOCATE THREE (3) EXISTING LOAD IN EXISTING 'R' PANELBOARD TO CLEAR A 3 BREAKER SPOT, ON THE SAME SIDE OF THE PANEL E.G. 29, 31, 33. PROVIDE A NEW CIRCUIT BREAKER 50AMPS/3P. PROVIDE A NEW APPROX. 120 FEET FEEDER, 4 #8 & 1 #10 GND, IN 1" CONDUIT TO NEW 'R1' PANEL.



LIGHTING FIXTURE SCHEDULE											
DESIGNATION		DESCRIPTION	MANUFACTURER/ MODEL NUMBER	LAMP			ELECTRICAL				NOTES
				TYPE	COLOR TEMP	NO	BALLAST	VOLTAGE	WATTS	LUMENS	
B	T-GRID TROFFER	2'X2', RECESSED, ENERGY EFFICIENT, LOW PROFILE	PHILIPS LIGHTING DAY-BRITE 2TG30L840-2-FS-02F-UNV	LED	4000	----	NO BALLAST	UNV	31	4000	
BE	T-GRID TROFFER, 2'X2', RECESSED, ENERGY EFFICIENT, LOW PROFILE, W/BATTERY		PHILIPS LIGHTING DAY-BRITE 2TG30L840-2-FS-02F-UNV-EMLED16	LED	4000	----	NO BALLAST	UNV	31	4000	①

LIGHTING SCHEDULE NOTES

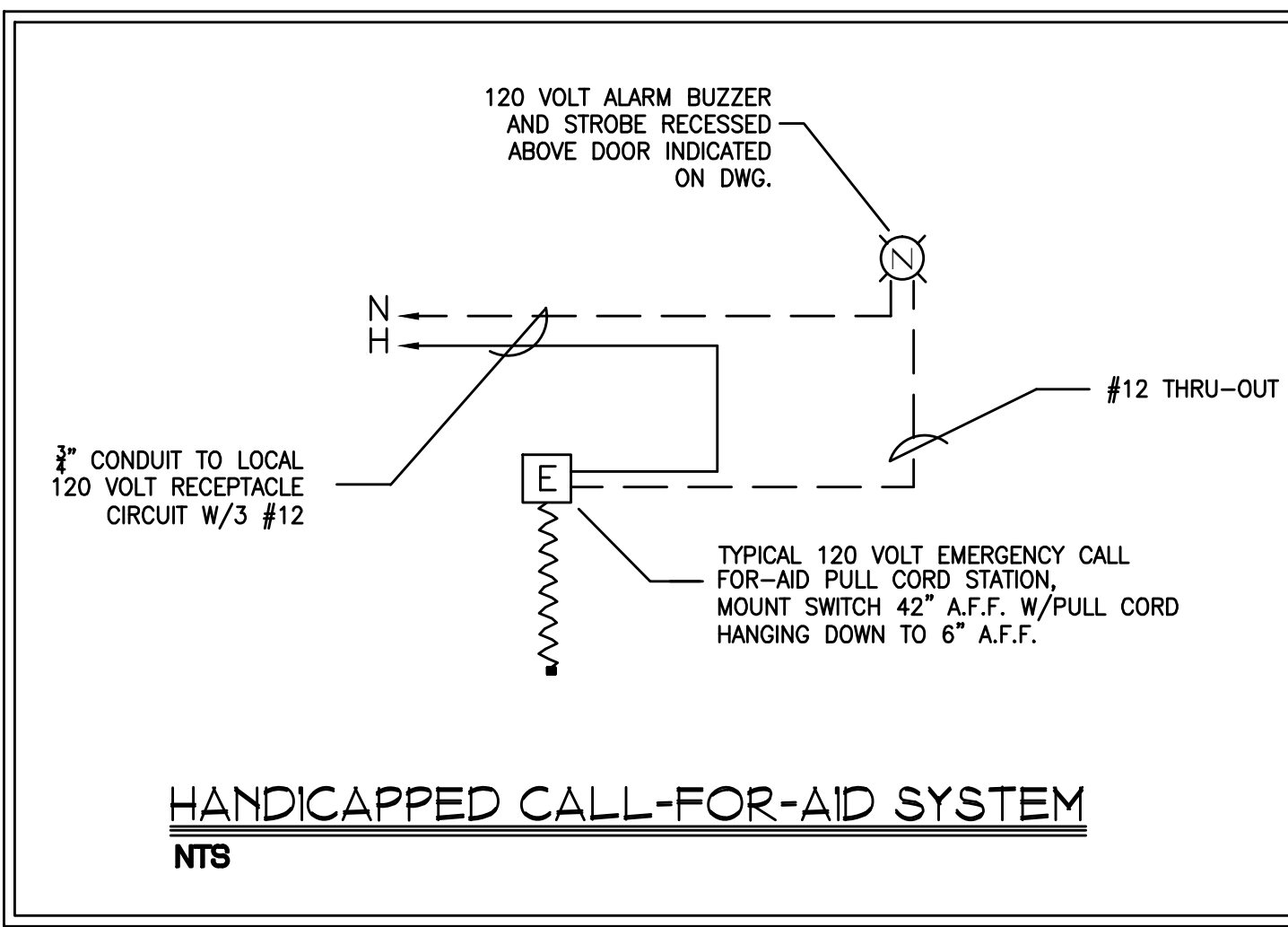
- ① FURNISH W/FACTORY EMERGENCY SEALED NiCd BATTERY PACK FOR 90 MINUTES EMERGENCY LIGHTING OPERATION.
- ALL EXTERIOR FIXTURES AND INTERIOR FIXTURES IN UNHEATED SPACES SHALL BE CAPABLE OF OPERATING IN COLD TEMP (0° F).

GENERAL DEMOLITION NOTES

- THE EXISTING FACILITY WILL BE OCCUPIED AND IN OPERATION DURING THE PERFORMANCE OF THE WORK.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF LIGHTS, DEVICES AND ASSOCIATED WIRING WHERE NEW EQUIPMENT IS SHOWN.
- WHEN NECESSARY TO TEMPORARILY DISCONNECT ANY EXISTING FEEDER OR BRANCH CIRCUIT SUPPLYING OCCUPIED FACILITIES, CONFER WITH THE OWNER AND SCHEDULE A MUTUALLY AGREEABLE PERIOD OF INTERRUPTION.
- WHERE REPLACEMENT, RELOCATION OR MODIFICATION OF EXISTING EQUIPMENT IS INDICATED, PROVIDE AND MAINTAIN ALL TEMPORARY FEEDERS, CONNECTIONS, CIRCUIT PROTECTION AND ANY OTHER MATERIALS AND APPURTENANCES REQUIRED TO MAINTAIN SERVICES TO OCCUPIED AREAS.
- NO WORK SHALL BE LEFT INCOMPLETE, NOR ANY HAZARDOUS SITUATION CREATED, WHICH WILL AFFECT THE LIFE OR SAFETY OF THE PUBLIC AND/OR BUILDING OCCUPANTS. AT NO TIME SHALL THE WORK INTERFERE WITH OR CUT OFF ANY OF THE EXISTING SERVICES WITHOUT THE OWNER'S PRIOR WRITTEN PERMISSION.
- THE OWNER RESERVES THE RIGHT TO OPERATE ALL EXISTING ELECTRICAL AND MECHANICAL EQUIPMENT NOT INCLUDED IN THIS WORK AND TO PERFORM ALL REQUIRED SERVICING AND REPAIRS TO SAME, AT ALL TIMES.
- IT IS REQUIRED THAT THE WORK INDICATED AND/OR SPECIFIED SHALL BE CARRIED OUT WITH A MINIMUM OF INTERFERENCE TO THE ESTABLISHED OPERATIONS OF THE BUILDING.
- ELECTRICAL DEMOLITION TO BE SUPERVISED BY LICENSED ELECTRICAL CONTRACTOR. EACH CIRCUIT TO BE VERIFIED "COLD" AND DISCONNECTED FROM ELECTRICAL SERVICE PRIOR TO COMMENCING REMOVAL.
- ALL MATERIALS BEING REMOVED SHALL BE HANDLED IN A MANNER COMPLYING WITH ALL PERTINENT LAWS, CODES AND ENVIRONMENTAL REGULATIONS.
- WHERE ELECTRICAL EQUIPMENT & DEVICES ARE BEING REMOVED, COORDINATE AND FIELD VERIFY IF BRANCH CIRCUIT FEEDS THROUGH TO EQUIPMENT/DEVICES TO REMAIN. BRANCH CIRCUITS SHALL BE SPLICED OR RELOCATED TO MAINTAIN CONTINUATION OF SERVICES.
- WHERE EXISTING DEVICES ARE REMOVED & NO NEW DEVICES ARE INSTALLED IN THE SAME LOCATION, REMOVE ALL WIRING FROM BOX & PROVIDE PROPERLY SIZED BLANK COVER PLATE.
- CONTRACTOR SHALL REMOVE ALL FLUORESCENT LIGHT FIXTURE BALLASTS & IDENTIFY THOSE CONTAINING PCB'S, ON ALL REMOVED LIGHTING FIXTURES.
- REFER TO ABATEMENT SCOPE FOR HANDLING OF MATERIALS. ALL REMOVED COMPONENTS SHALL BE LEGALLY DISPOSED OF BY CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE.
- COORDINATE ALSO WITH MECHANICAL AND PLUMBING DEMO PLANS FOR EQUIPMENT BEING REMOVED. DISCONNECT POWER AND REMOVE CONDUIT AND WIRING BACK TO PANEL.
- THE SITE SHALL BE BROOM-CLEANED AT THE END OF EACH WORKDAY.
- FOR PURPOSES OF THE CONTRACT, WHAT IS NOTED OR SHOWN ON DRAWINGS INDICATES THE SCOPE OF WORK REQUIRED AND QUALITY OF MATERIALS REQUIRED.
- CONTRACTOR TO EXAMINE ALL CONTRACT DOCUMENTS AND PERFORM ALL DEMOLITION BOTH FOR AREAS BEING RENOVATED AND FOR AREAS WHICH MUST BE REWORKED TO PERMIT THE INSTALLATION OF WORK BY THE VARIOUS TRADES.
- CONTRACTOR SHALL VISIT THE SITE AND VERIFY THE EXTENT OF DEMOLITION AND REMOVALS PRIOR TO THE SUBMISSION OF BIDS. NO CONSIDERATION SHALL BE GIVEN FOR FAILURE TO VISIT THE SITE.
- CONTRACTOR SHALL UTILIZE ALL THE BREAKERS IN THE EXISTING PANELS THAT BECOME AVAILABLE WHEN BRANCH CIRCUITS ASSOCIATED WITH THEM ARE DISCONNECTED AND REMOVED DUE TO DEMOLITION OF THE ELECTRICAL WORK.

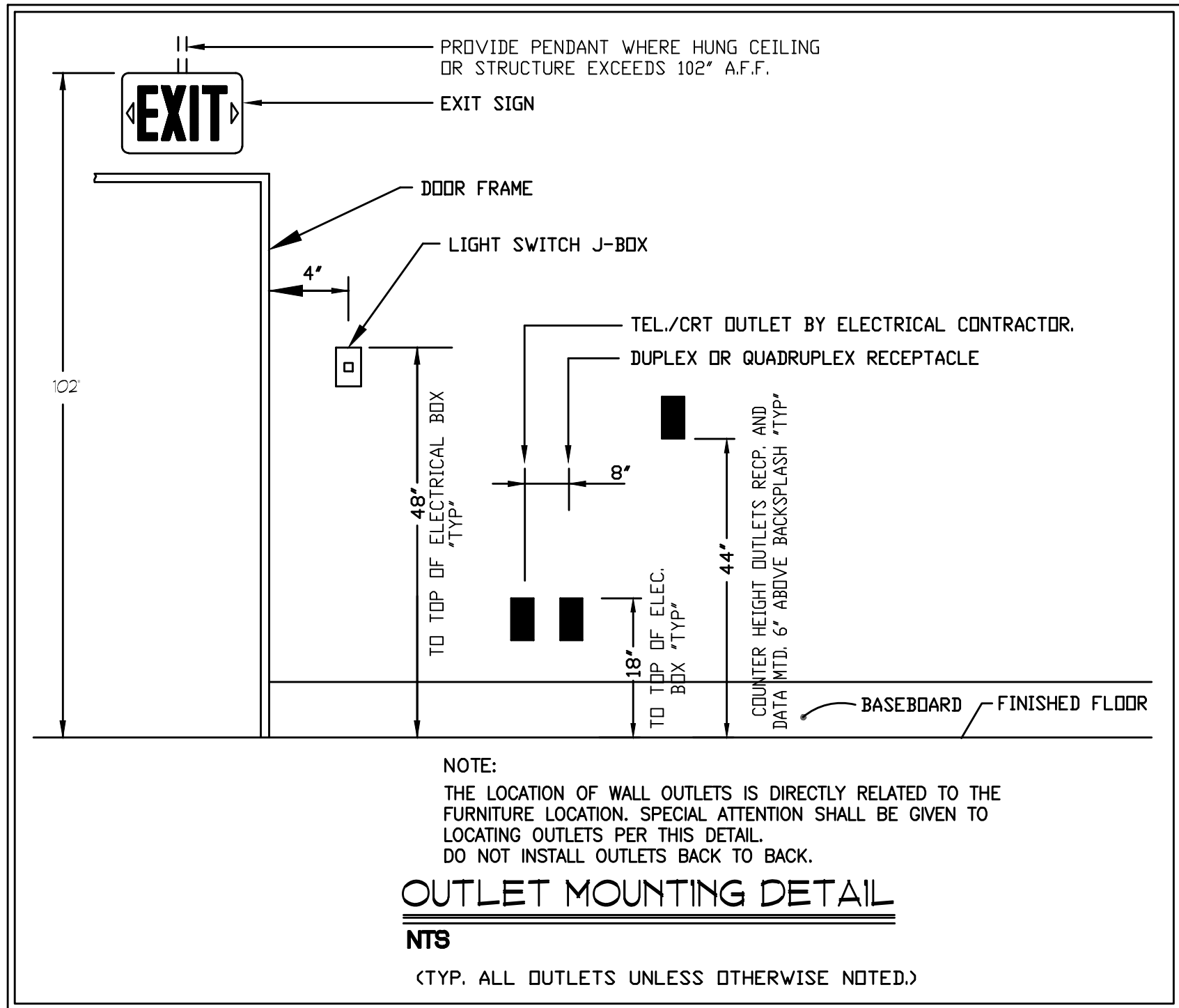
GENERAL NOTES - ELECTRICAL

- SPECIFICATION SECTIONS, GENERAL CONDITIONS, SUPPLEMENTAL GENERAL CONDITIONS AND DRAWINGS ARE INTEGRAL PARTS OF CONTRACT DOCUMENTS.
- SYSTEM COMPONENTS ARE LOCATED APPROXIMATELY ON DRAWINGS. BASE ACTUAL LOCATIONS ON FIELD VERIFICATION OF EXISTING BUILDING CHARACTERISTICS INCLUDING BUT NOT LIMITED TO STRUCTURAL, MECHANICAL, ELECTRICAL & ARCHITECTURAL COMPONENTS.
- ALL WORK AND ACTION DEPICTED AND DESCRIBED IN CONTRACT DOCUMENTS SHALL BE PERFORMED BY THE CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE.
- REFERENCE TO SPECIFIC SUB-CONTRACTORS SUCH AS "MECHANICAL", "ELECTRICAL", ETC. ARE INTENDED TO SUGGEST POSSIBLE DIVISION OF RESPONSIBILITY. PRIME CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND EXECUTION OF ALL WORK.
- OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS.
- ALL EQUIPMENT, MATERIALS AND RELATED SYSTEM COMPONENTS SHALL BE NEW UNLESS NOTED OTHERWISE.
- REPAIR AND REPLACE AT NO COST TO OWNER ALL EQUIPMENT AND MATERIALS DAMAGED DURING CONSTRUCTION.
- CIRCUITING DEPICTED FOR RECEPTACLES & LIGHTING FIXTURES DEFINES GROUPING OF FIXTURES, DEVICES AND COMPONENTS AND REQUIRED CONDUCTORS. CIRCUITING IS NOT INTENDED TO DEFINE CONDUIT LOCATIONS.
- STUDY THE PROJECT MANUAL & DRAWINGS OF OTHER DISCIPLINES INCLUDING ARCHITECTURAL, STRUCTURAL, CIVIL & MECHANICAL.
- PROVIDE SUPPORT/BRACING OF EQUIPMENT AND BUILDING SERVICES FOR SEISMIC RESTRAINT AS REQUIRED BY CODE.
- ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH THE APPLICABLE CODES IN THE ORDINANCES AND THE REGULATORY AGENCIES HAVING JURISDICTION.
- CONTRACTORS SHALL PROVIDE ALL REQUIRED SLEEVES AND SEALS FOR PIPES OR CONDUIT PENETRATING WALLS OR FLOOR SLABS WITH UL LISTED FIRE STOPPING SEALANT WHERE REQUIRED.
- ELECTRICAL CONDUITS & BOXES SHALL BE CONCEALED IN WALLS OR ABOVE CEILINGS WHEREVER POSSIBLE.
- FURNISH & INSTALL GFCI RECEPTACLES IN ALL WET LOCATIONS, WITHIN 4' TO 6' OFF WATER SOURCE.
- ALL PENETRATIONS THRU RATED WALLS & CEILINGS SHALL BE SEALED USING U.L. LISTED METHODS APPROPRIATE FOR INDICATED RATING.
- NO PENETRATIONS ARE ALLOWED INTO STAIR ENCLOSURES EXCEPT AS REQUIRED FOR SERVICES UTILIZED IN THE STAIR.
- ALL DEVICES WITHIN EXISTING AND NEW RATED WALLS (ON BOTH SIDES) SHALL BE SURFACE MOUNTED, REFER TO CODE PLANS FOR WALL RATING.



HANDICAPPED CALL-FOR-AID SYSTEM

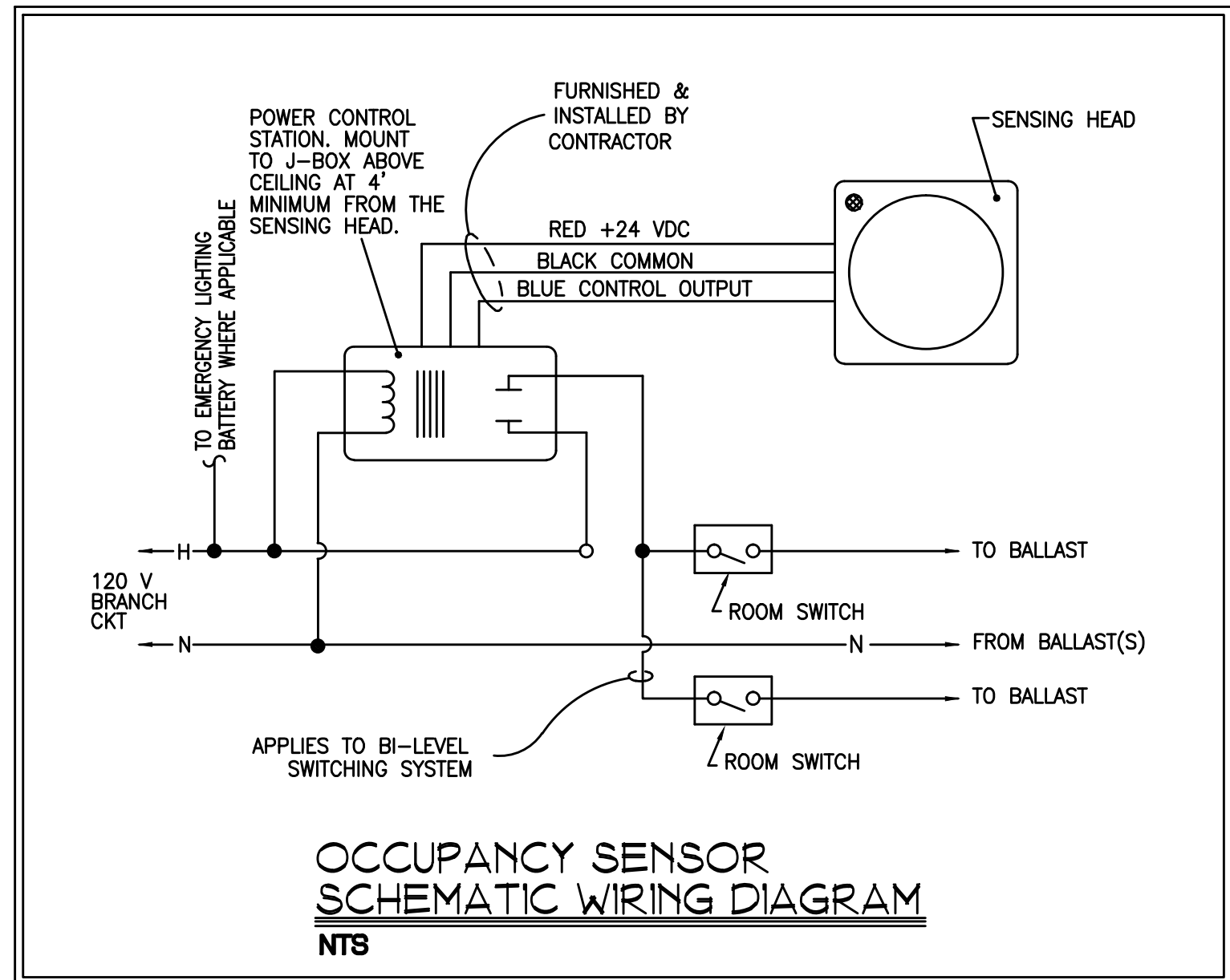
NTS



OUTLET MOUNTING DETAIL

NTS

(TYP. ALL OUTLETS UNLESS OTHERWISE NOTED.)



OCCUPANCY SENSOR SCHEMATIC WIRING DIAGRAM

NTS

OCCUPANCY SENSORS DETAILS

WALL MOUNTED USE:
WATTSTOPPER "DW-100", DUAL TECHNOLOGY: (ULTRASONIC AND PIR) OR EQUAL.

CEILING MOUNTED USE:
WATTSTOPPER "UT-300" IN BATHROOMS OR EQUAL.

WATTSTOPPER "DT-300" (DUAL TECHNOLOGY) IN WIDE RANGE OF SPACES, CONFERENCE ROOMS, OFFICES OR EQUAL.

- NOTES:
- MANUFACTURER TO PROVIDE A SENSOR LAYOUT SUBMITTAL DURING THE SUBMITTAL PROCESS.
 - PROVIDE ALL MOUNTING BRACKETS, CLIPS, J-BOX PER MANUFACTURING INSTALLATION REQUIREMENTS. TIME DELAY NO LESS THAN 15 MINUTES. FINAL TEST SHOULD BE PERFORMED WITH OWNER IN FIELD.

MOUNTING HEIGHTS

(UNLESS OTHERWISE NOTED)

RECEPTACLE	18" AFF TO TOP OF THE BOX 'TYP'
LIGHT SWITCHES	48" AFF TO TOP OF THE BOX 'TYP'
CLOCK OUTLETS	7'-6" AFF 'TYP'
FA STROBES	7'-6" AFF 'TYP'
PULL STATION	48" AFF TO TOP OF THE BOX 'TYP'
PANELBOARDS	6'-2" MAXIMUM HEIGHT TO THE CENTER OF THE GRIP OF THE OPERATING HANDLE OF THE SWITCH OR C/B, IN ITS HIGHEST POSITION, AFF, PER NEC 2005 '240.24 (A)', 'TYP'

ELECTRICAL LEGEND

(NOT ALL SYMBOLS ARE USED)

	ELECTRICAL PANELBOARD, 120/208 VOLT
	EXISTING FLUSH ELECTRICAL PANELBOARD, 120/208 VOLT
	NON-FUSED DISCONNECT SWITCH, MATCH CIRCUIT RATINGS
	FUSED DISCONNECT SWITCH, MATCH CIRCUIT RATINGS
	JUNCTION BOX CLG MTD, ACCORDING TO NEC REQUIREMENTS
	RECESSED WALL J-BOX FOR POWER CIRCUITS TO SYSTEM FURNITURE (4-20AMP 120/VAC CIRCUITS), 18" AFF.
	RECESSED LIGHT FIXTURE; SUBLETTER INDICATES FIXTURE TYPE
	TYPICAL RECESSED FLUORESCENT TROFFER; SUBLETTER INDICATES FIXTURE TYPE & SIZE.
	LIGHT FIXTURE WITH INTEGRAL BATTERY PACK FOR 90 MINUTE EMERGENCY LIGHTING.
	TYPICAL SURFACE MOUNTED OR CABLE HUNG FLUORESCENT FIXTURE; SUBLETTER INDICATES FIXTURE TYPE & SIZE.
	CEILING MOUNTED EXIT SIGN. SHADING INDICATES DIRECTION OF FIXTURE FACE. ARROW INDICATES DIRECTION OF CHEVRON. PROVIDE UNSWITCHED POWER FROM AREA LIGHTING CIRCUIT.
	WALL MOUNTED EXIT SIGN. INSTALL AT 7'-6" AFF OR AS NOTED.
	DOUBLE FACE EXIT SIGN.
	CEILING OR WALL-MOUNTED EMERGENCY LIGHT W/BATTERY BACK-UP; PROVIDE UNSWITCHED POWER FROM AREA LIG CIRCUIT. MOUNT AT 7'-2" AFF UNLESS NOTED OTHERWISE.
	SINGLE-POLE SWITCH; MOUNT AT 48" AFF, TO TOP OF BOX.
	SINGLE-POLE, MOTION SENSOR SWITCH; MOUNT AT 48" AFF.
	3-WAY SWITCH; MOUNT AT 48" AFF, TO TOP OF BOX.
	DUPLEX RECEPTACLE; MOUNT AT 18" AFF UNLESS OTHERWISE SPECIFIED.
	QUAD RECEPTACLE; MOUNT AT 18" AFF UNLESS OTHERWISE SPECIFIED.
	DUPLEX GROUND FAULT RECEPTACLE; MOUNT AT 18" AFF UNLESS OTHERWISE SPECIFIED.
	RECEPTACLE WITH OUTDOOR RATED IN-USE COVER PLATE. PROVIDE FLUSH MOUNTED BOX.
	DATA JACK LOCATION. PROVIDE 4" SQUARE BOX, 1-GANG RING (18" AFF, UNLESS NOTED OTHERWISE) & 1" EMT CONDUIT (WITH PULL STRING) TO 6" ABOVE ACCESSIBLE CEILING. INSTALLATION OF TEL/DATA CABLE AND FACE PLATE BY OTHERS.
	TELEPHONE JACK LOCATION. PROVIDE 4" SQUARE BOX, 1-GANG RING & 3/4" CONDUIT TO CEILING SPACE.
	EQUIPMENT TAG. REFER TO SCHEDULE ON THIS DRAWING FOR BRANCH CIRCUIT & CONTROL REQUIREMENTS.
	BRANCH CIRCUIT HOMERUN.
	EXISTING TO REMAIN.
	FIRE ALARM STROBE. CONNECT TO EXISTING NOTIFICATION CIRCUIT.
	POWERED DOOR OPERATOR FURNISHED WITH DOOR HARDWARE. PROVIDE 120V CONNECTION FROM LOCAL RECEPTACLE CIRCUIT. PROVIDE RACEWAY & CONTROL WIRE TO PUSHBUTTON LOCATION COORDINATED IN FIELD.
	NEW AREA SMOKE DETECTOR. UNIT MUST BE LISTED FOR OPERATION WITH EXISTING FIRE ALARM SYSTEM.

INCLUDE IN THE BASE BID THE PROVISION OF J-HOOK SUPPORTS FOR EXISTING FIBER OPTIC, DATA AND COMMUNICATION CABLING THAT EXISTS UNSUPPORTED ABOVE CEILINGS WHICH ARE BEING REMOVED.

FIRE ALARM SCOPE

COST FOR ALL FIRE ALARM WORK DEPICTED SHALL BE CARRIED AS PART OF THE SCOPE OF THIS PROJECT.

ALL FIRE ALARM EQUIPMENT (INITIATING DEVICES, NOTIFICATION DEVICES, POWER SUPPLIES, ETC) SHALL BE FURNISHED AND INSTALLED BY FIRE ALARM CONTRACTOR.

CONTRACTOR SHALL PROVIDE DEVICES WITH ALL NECESSARY MATERIALS AND ACCESSORIES FOR COMPLETE INSTALLATION TO BE FULLY OPERATIONAL (BACKBOXES, WIRING, CONDUITS AND OTHERS IF NEED IT). COORDINATE EXACT REQUIREMENTS WITH THE EQUIPMENT SUPPLIER.

PROVIDE BOOSTER POWER SUPPLY FOR POWER TO NEW NOTIFICATION DEVICES.

ELECTRICAL MEANS AND METHODS

(UNLESS OTHERWISE NOTED)

	OPEN CABLE	PIPE & WIRE	MC CABLE	SHARE NEUTRALS
UNDERGROUND CABLE	***	***		***
POWER BRANCH EXPOSED		***		***
POWER BRANCH CONCEALED			***	***
LIGHTING BRANCH EXPOSED	***			***
LIGHTING BRANCH CONCEALED			***	***
LDV VOLTAGE EXPOSED (i.e. Lighting Control)		***		
LDV VOLTAGE CONCEALED	***			
FEEDER EXPOSED		***		
FEEDER CONCEALED		***		
SEC./PA/Cameras/AV	***			
FIRE ALARM CONCEALED	***			
FIRE ALARM EXPOSED		***		

DETAILS
SCALE: NTS

1
E3

Project Title:

Bathroom Plumbing Repairs
Ledyard High School
24 Gallup Hill Road
Ledyard, Connecticut 06339



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Revision: Description:

Date:

Revised By:

Drawing Title:

Date:

FEBRUARY 29, 2016

Scale:

AS NOTED

Drawn By:

MS- ELEC. ENG.

Project Number:

45.139

Drawing Number:

DETAILS

E3